COMPARATIVE STUDY TO ASSESS THE LEVEL OF KNOWLEDGE AND PRACTICE ON INFANT FEEDING AMONG WORKING AND NON-WORKING MOTHERS IN SELECTED COMMUNITY AREAS AT COIMBATORE

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CERTIFICATE

This is to certify that the dissertation, **"Comparative study to assess the level of Knowledge and Practice on Infant Feeding among working and non-working mothers in selected community areas at Coimbatore",** is the bonafide work done by **Mrs.T.Vajramala,** R.V.S College of Nursing, R.V.S Educational Trust, Sulur, Coimbatore, submitted to The Tamil Nadu Dr. M.G.R Medical University, Chennai-32, in partial fulfillment of the requirement for the award of the degree of M.Sc (Nursing) (Branch II – Child Health Nursing) under our guidance and supervision during the academic period from 2013-2015.

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ABSTRACT

Comparative study to assess the level of Knowledge and Practice on Infant Feeding among working and non-working mothers in selected community areas at Coimbatore.

The aim of the study was to assess and compare the level of knowledge and practice on infant feeding among working and non-working mothers by Structured Interview Schedule in selected community areas.

Conceptual frame work for this study is based on **Health Belief Model (Rosenstoch 1999)**. Survey approach with descriptive design was used. The sample size consisted of 100 mothers (50 working and 50 non-working mothers) selected from the areas of Kodangipalayam and Somanur by using purposive sampling technique.

The data were collected using a Sructured Interview Schedule and the Tool was organized in three parts. (Demographic characteristics, Knowledge and Practice questions on infant feeding). Investigator asked the questions and provided adequate time to receive their responses and to recall their practice during an Interview. Using the same approach, the investigator interviewed all the working and non-working mothers. The average time taken for completion of the Interview was 45 minutes in each mother.

The results of the study showed that there was a significant difference in overall mean knowledge score between working and non-working mothers on infant feeding "t" = 11.11, ($P<0.05$, df = 98) and there was no significant difference in overall mean practice score between working and non-working mothers " t" =1.26 $P<0.05$, df = 98).

There was a significant association between the occupation of mothers and the level of knowledge on infant feeding (χ^2=42.87, $p< 0.05$, df =2, "t" value=5.99).

There was no association found between the level of practice and selected demographic characteristics of working and non-working mothers.

Conclusion:

The findings of the study concluded that non-working mothers had more knowledge than working mothers on infant feeding. Whereas both working and non-working mothers had almost same level of practice on infant feeding.

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INTRODUCTION

"Children are the wealth of tomorrow…….take care of them if you wish to have a strong India…."

-Karl Meninger

1.1 BACKGROUND OF THE STUDY

Children are our future and most precious resources. After birth the health of the baby depends on the nurturing practices adopted by the families. Children always need special care to survive and thrive. Good health of these precious members of the society should be ensured as prime importance in all countries. Today's children are tomorrow citizens. Health children make a healthy nation hence the importance of feeding them right from the birth especially first year of life.

Infant feeding from birth to the first year of life influences the child's optimal growth and development. Infant feeding practices includes exclusive breastfeeding for six months, the timely and appropriate of complementary feeding after six months with continue breastfeeding.

Breast feeding is the first fundamental right of every child. Breast milk is the sources of nutrition freely available to the new born babies from the mother. It is an adequate nutritional food up to the baby's age of six months and protects the baby from various diseases. Breastfeeding is important for the health and development of children and also for the mothers. Just as there is no substitute for mother's love, there is no substitute for mother's milk. Breast milk is only the best, it is a must for the infants. Breast milk is safest and most secure nourishment for babies and protect them against illness. The nutrients in the breast milk include all the proteins, fat, sugars, vitamins, minerals and anti-infective factors.

Breast milk is uncontaminated food that protects infants from infection and has an effect on the long term consequences, especially during adulthood, to prevent obesity and cardiovascular diseases. Practice of giving pre-lacteal feeds was found also a key determinant of early cessation of full breastfeeding. It is also associated with infant illness **MisganLegesse (2014).**Infants who were exclusively breast fed up

to six months were less affected by diarrhea and did not have growth deficits. Under nutrition is associated with over 50% of deaths in children under 5, but optimal breast feeding could save around 8, 00,000 lives in this vulnerable age group every year.

Breastfeeding is the best way to feed a newborn, providing all the nutrients needed for healthy growth and development. It delivers antibodies, which boost a neonate's immunity system, protects from child hood illnesses, such as diarrhea, pneumonia, and other causes of under-five mortality.

World Health Organization (WHO) recommends exclusive breast feeding for the first 6 months of life. UNICEF & WHO launched Baby Friendly Hospital Initiative in 1992 as a part of global effort to protect, promote and support Breast feeding. Appropriate feeding is crucial for the healthy growth and development of an infant. Children are the wealth of tomorrow. Children always need special care to survive and thrive. Good health of these precious members of the society should be ensured as prime importance in all countries. The department of health and child welfare has recommended exclusive breast feeding for the first 6 months of life with the gradual introduction of solid foods with breastfeeding until 2 years of age and beyond. Solids should be introduced for the babies at around 6 months after birth. (**FSSAI 2012)**

Numerous studies have underlined the advantages of exclusive breastfeeding for growth, immunity and prevention of illness in young infants. Conversely, several studies associate lack of exclusive breastfeeding with high infant mortality and morbidity from malnutrition and infections. Despite the well-recognized importance of exclusive breastfeeding, this practice is not widespread in the developing world and the increase at the global level is very modest with much room for improvement. Infant nutrition programs worldwide continue to require investment and commitment to improve feeding practices in order to have maximum impact on reducing infant morbidity and mortality.

If exclusive breastfed infants do not develop properly, before considering the introduction of complementary foods, a careful assessment should be made to verify whether they are not ingesting too little breast milk due to a poor breastfeeding technique, which leads to improper emptying of the breasts and, consequently, to low milk production. In these cases, the usual recommendation is that mothers should

receive instructions and support, so that the baby can increase the intake of breast milk and complementary feeding is not introduced unnecessarily.

More recently, the early introduction of complementary foods has been associated with the development of atopic diseases. Exclusive breastfeeding minimizes the risk of asthma and this protective effect seems to persist for at least during the first decade of life, which is particularly evident in children with a family history of atopic diseases. Exclusive breastfeeding also seems to protect against the development of type 1 diabetes mellitus. It has been described that early exposure to cow's milk (before the fourth month) can be an important determinant factor for this disease and it can increase the risk for diabetes by 50%. It is estimated that 30% of the cases of type 1 diabetes mellitus could be avoided if 90% of the infants aged up to three months were not fed cow's milk.**(M.M.A.Faridi 1993)**

After the sixth month of life the nutritional requirements of infants cannot be provided only by breast milk. Most infants reach a general and neurological stage of development (chewing, swallowing, digestion and excretion) that enables them to be fed with other foods rather than breast milk alone.

According to **WHO 2012**, the gradual replacement of breast milk by solid food as the main source of nutrition for infant is known as weaning. Complementary feeding means giving the child other nutritious foods in addition to breast milk. Breast feeding alone is sufficient food for first six months. Thereafter, concentrated energy giving complementary foods are essential in order to maintain an adequate range of growth for infant. **(O.PGHAI, 2005)**

A proper complementary feeding consists of foods that are rich in energy and in micronutrients (especially iron, zinc, calcium, vitamin A, vitamin C and folates), free of contamination (pathogens, toxins or harmful chemicals), without much salt or spices, easy to eat and easily accepted and digested by the infant, in an appropriate amount, easy to prepare from family foods, and at a cost that is acceptable by most families. The infant can be fed family foods, provided that consistency and energy content are appropriate. From the Sixth month onwards, foods should vary and balanced mixtures containing cereals, pulses, foods of animal and vegetable origin, and fat should be offered. Therefore, infants should be initially offered foods containing low sugar and salt contents. It is important to offer, every day if possible,

the foods of animal origin (rich in iron and proteins), fruit and vegetables, especially those rich in vitamins. Avoid sugary beverages (soft drinks and others), as they reduce the infant's appetite for more nutritious foods and may soften the stools. Tea and coffee are also unadvisable because they may interfere with iron uptake.

To meet the mineral requirements of infants, a variety of mineral-rich complementary foods should be offered, since the consumption of these foods is relatively small among infants/children aged between six and 24 months. From 9 to 11 months of life, the amount of minerals that should be provided through complementary foods (97%-iron,-86% zinc,81%- phosphorus, 76%-magnesium, 73%-sodium and 72%-calcium).At 10 months, the infant can eat grain foods. At 12 months, most of the infants must eat the same foods as their family eats. These foods must have appropriate energy content. Semi-solid foods should be restricted, as much as possible.

Currently, WHO recommends that mothers/caregivers of infants younger than two years should follow the responsive feeding practice, which employs the principles of psychosocial care? This practice includes respect for the physiological mechanism that self-regulates the appetite in infants, helping them to feed until they feel satiated, and requires that mothers/caregivers be aware of the signs of hunger and satiety expressed by the infants. Infants should be fed slowly and patiently until they feel satiated; they should never be force-fed. Meals should be pleasant, with emotional exchange between the person who feeds and the infant, using eye contact, touching, smiling and talking. If infants refuse to eat several foods, different combinations, flavors should be given. Encourage them to eat without diverting their attention during the meal. There is some evidence that active feeding improves food ingestion and the infant's nutritional status, and development.

In some countries, there is a recommendation to only introduce some specific foods, considered highly allergic, after the second year of life. Cow's milk (responsible for 20% of food allergies) ranks on the top of the list, being not recommended before 9-12 months. In case of important family history of food allergy, it is recommended that foods such as eggs, peanuts, nuts and fish not be given in the first year of life. There is a recommendation that honey should be avoided in infants younger than 12 months in order to prevent botulism.

Over 10% of 5.8 billion people are children less than 5 years of age, and over 10.5 million deaths occur each year among children less than five years of age in the world wide and 22% of deaths occur in India. Two thirds of these deaths occur during the first year of life and are closely associated with poor breast feeding and poor Infant feeding practices. Underweight was estimated to cause 3.7 million deaths. This accounted for about 1 in 15 deaths globally. W.H.O has estimated that approximately 27% (168 million) of children fewer than one year old are underweight especially in the pre weaning 0-6 months of age, and post weaning period of 6-24 months. **Adriano Cattaneo (2006)**

The 'germ' of malnutrition 'infects' a fetus in the intra-uterine life due to lack of sufficient antenatal care on part of the mother. The condition deteriorates further when after birth the infant is deprived of exclusive breast feeding or initiation of weaning is delayed. Weaning should be started after the age of 6 months and should contain energy rich semi-solid food. Malnutrition makes a child susceptible to infections and delays recovery, thus increasing mortality and morbidity. Every time an innocent child suffers the curse of malnutrition; the responsibility goes to the mother, the family and to the community due to their faulty or no knowledge regarding the harmful effects of pre-lacteal feeding, benefits of exclusive breast feeding and initiation of proper weaning at correct time. It is to be realized that a million children die worldwide each year because they are not breast fed. Several millions who survive suffer from acute or chronic illness related to harmful effects of artificial feeding. These sufferings are unnecessary and can be prevented by discouraging bottle feeding and initiating efforts to bring back the exclusive breast feeding and proper weaning practices.

Malnutrition in children is widely prevalent in India. It is estimated that 5.7 million children are underweight (moderate and severe) and more than 50% of deaths in 0-4 years are associated with malnutrition. The most vulnerable period for malnutrition is first 2 years of life. (Usually 6 months – 12 months).**Sushma Sriram(2011)**

Proactive interventions and education of mothers, caregivers and staff is needed to protect and support appropriate infant and young child feeding practices. Good infant and child feeding can help to reduce the possibility of micronutrient

deficiencies through exclusive breastfeeding during the first six months of life followed by the introduction of micronutrient rich foods.

1.2 NEED FOR THE STUDY

Children are our future and most precious resources. After birth, the health of the baby depends on the nurturing practices adopted by the families. Breast milk is the basic food for the infant. Breast feeding is the most natural method for feeding an infant. It provides all the energy nutrients that are needed for the first few months of life, and it continues to provide up to 2 years of child's life. **WHO (1991)** define breast feeding as the feed that provides milk to the child either directly from the breast or expressed. Breast feeding should be initiated with in the first half an hour after birth. The first milk is most suitable for the new born. It is thick and yellow colored. The Shastra's call it "peeyusha" and western sciences use the word "colostrums". Breast milk is always fresh, pure, readymade, requiring no preparation. It is also at the right temperature, uncontaminated and aseptic. Human milk is the most appropriate milk for the human infants because it is uniquely adapted to its needs. A healthy mother can produce enough (400 -800ml/day) milk to meet the caloric requirements of child till the age of 6 months. Hence, WHO recommends exclusive breast feeding till this age.

Breastfeeding has an extraordinary range of benefits and it has profound impact on child survival, health, nutrition and development. It provides the infant with nutrients; vitamins and minerals needed for the growth and development for the first six months. No other liquids or food are needed during this period. In addition, it carries antibodies from the mother to the child. The act of breastfeeding itself stimulates proper growth of the mouth, jaw and secretion of enzyme for digestion **(ICN, 2103)**

Breastfeeding creates a special bond between mother and baby which leads to positive repercussion for life, in terms of stimulation behavior, speech sense of wellbeing and security. It also lowers the risk of chronic diseases, such as obesity, high cholesterol, high blood pressure, diabetes, childhood asthma, and childhood leukemia. Studies are shown that breastfed infants do better on intelligence and behavior test in adulthood than formula fed babies **(UNICEF, 2013).** Breastfeeding also contributes to maternal health immediately after the delivery because it reduces

the risk of post-partum hemorrhage. In the short term, breastfeeding delays the return to fertility and in long term reduce the breast, uterine and ovarian cancer.

When infant reaches 4-6 months, milk alone will not be sufficient to meet the increased nutrients needs for the infant. Breast milk combined with a healthy balanced diet, rich in fruits and vegetables will provide all the nutrients needed for the infant. At this stage infant natural iron stores which they received in the womb will have depleted. So it is important to include iron rich foods in the infant diet.

Weaning is time of nutritional vulnerability; it represents a period of dietary transition just when nutritional requirements for growth and brain developments are high. A nutritionally adequate weaning diet is essential for achieving optimum growth in the first year. Growth in the first year influences both the well-being of the child and long term health of the adult. The term "weaning" has been traditionally described as withdrawal from breast feeding, i.e. when breast feeding is gradually replaced by fresh or modified cow's milk, or by semisolid food. This should be a transitional change from liquid to solid diet. The infants feeding behavior changes from suckling to chewing and biting later on this will changes to independent feeding.

Advice on good weaning practice is needed for many mothers. It can otherwise be a time of considerable confusion when detrimental dietary habits may be established.

Fulfilling the nutritional requirement of the infant helps to achieve the basic goal of satisfactory growth and prevention of acute and chronic illness. Complementary feeding as described by WHO refers to the addition of energy and non-energy containing fluids, non-human milk, and semi-solids or solids to children's diet. Weaning is easier if a child has taken milk from some other source besides mother's breast before that time. Natural weaning occurs as the infant begins to accept increasing amounts and types of complementary feedings while still breastfeeding on demand. When natural weaning is practiced, complete weaning usually takes place between two and four years of age. Planned weaning occurs when the mother decides to wean without receiving signals from the infant that he is ready to stop breastfeeding. Some reasons commonly given for planned weaning include the following: not enough milk or concerns about the baby's growth, painful feedings or mastitis, returning to work, a new pregnancy etc. **Razia Chaudhry(2006)**

The late introduction of complementary foods also is disadvantageous, because infant growth stops or slows down and the risk of malnutrition and micronutrient deficiency increases. Several problems are related to infant feeding such as inadequate nutrients and unsafe practices leading to serious health problems among the infants. Most common problems are under feeding, inadequate nutrients, growth delay, malnutrition etc. Improper practice and knowledge among the mothers make the innocent child suffers the curse of malnutrition. Delayed weaning, unhygienic techniques made child ill therefore this remains a challenge to ensure optimal breastfeeding and weaning and adequate infant nutrition.

During the field visit to the community area, the investigator found that many infants are malnourished. Therefore the investigators wish to identify the Knowledge and Practice of the working and non-working mothers on infant feeding.

1.3 STATEMENT OF THE PROBLEM

"Comparative study to assess the level of Knowledge and Practice on Infant Feeding among working and non-working mothers in selected community areas at Coimbatore"

1.4 AIM OF THE STUDY

The aim of the study was to assess and compare the level of knowledge and practice on infant feeding among working and non-working mothers by structured interview schedule in selected community areas.

1.5 OBJECTIVES

The specific objectives of the study were:

1.5.1 To assess and compare the level of knowledge of working and non-working mothers regarding infant feeding.

1.5.2 To assess and compare the level of practice of working and non-working mothers regarding infant feeding.

1.5.3 To associate the level of knowledge of working and non-working mothers with the selected demographic variables.

1.5.4 To associate the level of practice of working and non-working mothers with the selected demographic variables.

1.6 HYPOTHESIS

Ho1: There is no significant difference between the mean knowledge score of working mothers and non-working mothers on infant feeding.

Ho2: There is no significant difference between the mean practice score of working mothers and non-working mothers on infant feeding.

1.7 OPERATIONAL DEFINITION

1.7.1 Knowledge: In this study it refers to correct verbal response of mothers regarding Infant feeding and it would be assessed by using structured Interview Questionnaires. Knowledge level is grouped as below average, average and above average.

1.7.2 Feeding practice: Feeding practice include exclusive breastfeeding, till six months of age. It also includes timely and appropriate introduction of complementary feeding after six months of age, with continued breastfeeding. Practice will be assessed by using Structured Interview Questionnaires.

1.7.3 Infant: a child during the earliest period of its life, especially before he or she can walk. In this study infant refers to children between the ages of one month to one year.

1.7.4 Working mothers: In this study working mothers refer to employed women between 18-35 years of age, working in the government or private agency residing in the selected community areas at Coimbatore.

1.7.5 Non-working mothers: In this study non-working mothers refer to housewives between 18 to 35 years of age residing in the selected community areas at Coimbatore.

1.8 ASSUMPTIONS

- Nutritional problems and infections are prevalent in infants.
- Mortality and morbidity rates are high in infants due to poor feeding practices.

1.9 LIMITATIONS

- Study cannot be done in mothers of Twin babies.
- Information is based on their self-reported feeding practice.

1.10 DELIMITATION

The study was delimited to a specific community area and only to the mothers (working and non-working) having children with the age group of one month to one year.

1.11 SCOPE OF THE STUDY

- The findings of the study will reveal the existing knowledge of the working and non-working mothers regarding infant feeding.
- Child Health Nurse, Community Health Nurse and Maternal Health Nurse can use this survey information in providing better knowledge on infant feeding practice for mothers by health education, demonstration of proper feeding techniques and conducting health camp.

1.12 CONCEPTUAL FRAMEWORK

The conceptual framework refers to the interrelated concepts that are assembled together in rational scheme by virtue of their relevance to the common theme. **(Polit and Hungler 1999)**

Conceptual frame work for this study is modified based on **Health Belief Model.** This model attempts to explain and identify the level of knowledge and practice of mothers on infant feeding.

Individual Perception

Individual perception is the first component of this model which includes perceived susceptibility/seriousness of illness related to inadequate Knowledge and Practice on infant feeding among working and non-working mothers.

Modifying factors

The second component of the model consists of modifying factors such as, demographic characteristics, perceived threat of illnesses and cue to action.

1. Demographic variables: Personal characteristics of the mothers are age**,** education, family income, occupation, religion, type of delivery**.**

Related to child: Number of children, sex, age of the last child, maturity of the child

2. Perceived threat: In this study perceived threats are malnutrition, infection, delayed weaning, unsafe practice and growth delay.

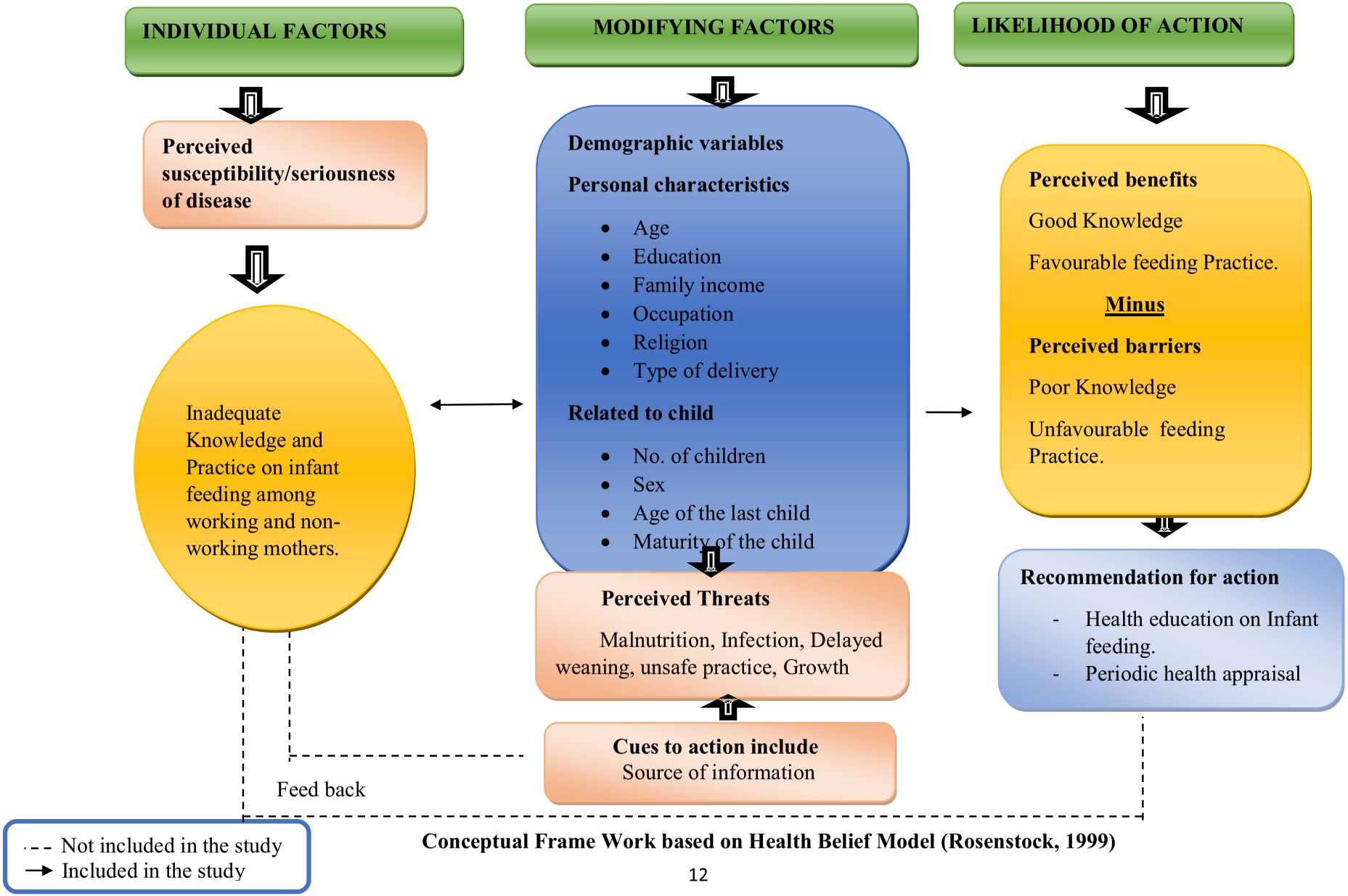
3. Cue to action: Source of information

Likelihood of action

The third component of this present model is the Likelihood of action. A person will take preventive action which involves the perception of benefits of taking action. However action may not take place, even though an individual may believe that the benefits of taking action are effective. This may be due to barriers relating to the characteristics of a treatment for preventive measures may be inconvenient, expensive, unpleasant, painful or upsetting. Individuals are more likely to engage in preventive health behavior when barriers are low and they perceive that they are susceptible to an illness or injury.

In this study the perceived benefits maybe good knowledge, favorable feeding Practice. The Perceived barriers are poor knowledge, unfavorable feeding practice. When the ill effects and the barriers are low, the mothers are more likely to take certain health action like gaining additional knowledge and practice on infant feeding.

If the mother's knowledge and practice were found poor the nurse can plan for health education to the mothers and periodic health appraisal for the infants.



Conceptual Frame Work based on Health Belief Model (Rosenstock, 1999)

CHAPTER-II

REVIEW OF LITERATURE

A literature review early in the report provides with a background for understanding current knowledge on a topic and illuminates the significance for the new study. **(Denise F.Polit 2010)**

A literature review is defined as a broad comprehensive, in depth, systematic and critical review of scholarly publication, unpublished printed or audio visual materials and personal communications. **(S. K. Sharma 2005)**

A literature is a description and analysis of the literature relevant to a particular field or topic.

A literature review is a body of text that aims to review the critical field or topic. A literature and analysis is a body of text that aims to review the critical points of knowledge on a particular topic of research. **(ANA 2000)**

The researcher came across several theoretical and empirical literature related to the topic under study.

Literature related to the topic presented in this chapter are as follows

2.1 Literature related to knowledge of mother on infant feeding.

2.2 Literature related to practice of mother on infant feeding.

2.1 Literature related to knowledge of mother on infant feeding

K. Kala (2013) conducted a study to assess the knowledge regarding weaning foods among mothers of infants in a selected Hospital at Salem. Quantitative descriptive research design. The setting was Sri Gokulam Hospital at Salem and the Sample size was 30. The samples were selected by non-probability convenience sampling. Data was collected by using structured interview Schedule. The results found that 1(3.3%) mother had below average knowledge, 25(83.3%) had average knowledge and 4 (13.3%) had above average knowledge. Study concluded that mothers of infants need to be educated regarding weaning foods to reduce the malnutrition of infants.

Younes L, Houweling TA, *et al* (2010) conducted a study on effect of participatory women's groups on infant feeding and knowledge on child health, behavior and outcomes in rural area at Bangladesh. The aim of the study was to improve maternal and newborn health in rural settings. Cluster-randomized controlled trial sampling technique was used. Sample size was 162 women's groups which met regularly between April 2010 and December 2011 to identify prioritize and address issues that affect the health of under five children. A controlled before-and-after study design and difference-in-difference analysis was used to assess the morbidity outcomes and changes in knowledge and practices related to child feeding, hygiene and care-seeking behavior. Significant improvements were measured in terms of mothers' knowledge on disease prevention and management, danger signs of ill health, and hand washing at critical times. Significant increases were seen in exclusive breastfeeding for at least 6 months (15.3% (4.2% to 26.5%)), and mean duration of breastfeeding (37.9 days (17.4 to 58.3)). Maternal reports of under-5 morbidities reduced after intervention compared with control areas, including reports of fever (-10.5% (-15.1% to -6.0%)) and acute respiratory infections (-12.2% (-15.6% to -8.8%)). No differences were observed in dietary diversity scores or immunization uptake. Community mobilization through participatory women's groups can be successfully adapted to address health knowledge and practice in relation to child's health, leading to improvements in a number of child health indicators and behaviors.

Khushnuma Chothia (2009) conducted a study to assess the knowledge of mothers of the high income group in urban Baroda, related to breastfeeding and weaning. 50 mothers with children aged 4month to 12 months were studied. Maternal knowledge regarding breastfeeding and weaning were assessed using pretested questionnaires. Sampling technique was purposive sampling. Results indicated that only half of the group of mothers breast fed to their babies on the first day. Breastfeeding was stopped when the child was 3-6 months; top feeding and solid supplements were initiated at 4-6 months. Mainly commercial baby foods were used for weaning. 20%mothers avoided ‘dals’ for the child because these were believed to be difficult to digest and produced gas in the child’s stomach. 30% of the mothers were not in favor of feeding the sick child with small frequent meals. The study concluded that the mothers need to be educated about breastfeeding and weaning.

Sawsan *et al* (2009) conducted a study to assess the knowledge and attitude of mothers concerning infant and young child feeding in PHC centers at Erbil city. The main aim of the study was to improve the infant and young child feeding practices in children from birth-23 months. Nutrition, health, development of children will ultimately impact child survival. A survey was carried out in PHC centers to assess the knowledge and attitude of mothers concerning infant and young child feeding. By using purposive (non-probability) sampling technique a sample of 100 mothers were selected. The results of present study showed that the mothers had efficient attitudes toward formula and complementary feeding, but infant and young child feeding indicators concerning early initiation and exclusive breastfeeding were poor among mothers attending PHC centers in Erbil. The study concluded that majority of the mothers had poor knowledge on breastfeeding in Erbil city. The investigators decided to construct an educational health program to be implemented by nurses in Primary Health Care centers in Erbil city for improving mother's knowledge and attitude on infant and young child feeding. The study recommended to revitalizing and expanding the Baby-Friendly Hospital Initiative and establishing breastfeeding intervention programs for protection, promotion, and support of breastfeeding.

Dakashayini K. P (2007) conducted a study to assess the knowledge, attitude and practice of primi para mothers regarding breastfeeding. It is a descriptive survey approach, non-experimental descriptive design. Population was primi para mothers who were admitted to Chaluvamba hospital and who were breastfeeding. Sample size was 100 primi para mothers. Sampling technique was non-probability convenient sampling technique. The tool was Structured Interview Schedule to assess the knowledge. Self-reporting checklist was used to assess the practice and Self-reporting scale used to assess attitude of mothers regarding breastfeeding. Results showed that 44% of primi mothers were inadequate in knowledge, 32% of mothers were having adequate knowledge and 24% were having moderate knowledge and 46% of mothers had inadequate practice, 27%were having adequate practice and 27% were having moderately adequate practice. 40% of mothers were having unfavorable attitude, 25%were having favorable and 35% of mother were having moderately favorable attitude towards breastfeeding. The study findings concluded that primi mothers need to be educated regarding breastfeeding to prevent mortality and morbidity amoung children.

Chinnaswamy Azhagesan (2004) conducted a study to assess the effectiveness of a structured teaching programme on knowledge and attitude regarding weaning foods among the mothers of hospitalized infants (0-12months) in RMMCH. Design was one group pretest and posttest design (quasi experimental design) and the sample size was 60 mothers. Sample technique used was simple random sampling. Data were collected by using questionnaire and result showed that the mothers had inadequate knowledge regarding weaning foods and none of the mothers had positive attitude before intervention. The study concluded that the structured teaching programme was effective in improving the knowledge and attitude of the mothers towards weaning foods.

Qianling Zhou, Katherine M Younger El Al., (2004) conducted a study about knowledge and attitude towards breastfeeding among Chinese mothers in Ireland. A cross-sectional self-administrated survey written in Chinese was distributed to a convenience sample of 322 immigrant Chinese mothers' Chinese supermarkets and Chinese language schools in Dublin, using the snowball method to increase sample size. Maternal breastfeeding knowledge and attitude were described, their associations with socio-demographic variables were explored by Chi-square analysis, and their independent associations with breastfeeding behaviors were estimated by binary logistic regression analyses. Findings highlighted the need to focus on resources, and education on correcting the misconceptions identified and reversing the negative attitudes towards breastfeeding among Chinese mothers in Ireland, in particular those with primary/secondary level of education. Mother's cultural beliefs should also be acknowledged and understood by healthcare providers.

Mabel Yap, Foo Ling Li, (2001) conducted a study to assess the duration of breastfeeding among working and non-working mothers in Singapore. A National Breastfeeding Survey was done to examine factors, including working status, associated with breastfeeding duration. All women who delivered in the eight hospitals with obstetric services in Singapore from 1 April to 31 May 2001 were invited to participate in a survey on infant feeding and nutrition from 2 to 6 months postpartum. Samples were selected by purposive sampling technique. A total of 214 respondents were interviewed for variables that were known or suspected to be associated with breastfeeding initiation and duration. Cox proportional hazards model was used to determine the associated effect of working status on breastfeeding

duration. Results showed that working status had no effect on initiation of breastfeeding, but had an effect on breastfeeding duration. The median breastfeeding duration for non-working and working mothers were 9 weeks and 8 weeks, respectively. This difference was significant by log rank test [hazard ratio (HR) = 1.27, 95% confidence interval (CI) *P* value <0.001]. About 31% of non-working mothers breastfed up to 6 months as compared to 20% of working mothers. Working mothers were more likely to stop breastfeeding than non-working mothers (HR = 1.61, 95% CI 1.43–1.85, *P* value = 0.001). The most important reason for working mothers stopping breastfeeding between 2 and 6 months was attributable to work. The study concluded that breastfeeding-friendly initiatives need to be put in place at workplaces to encourage working mothers to continue breastfeeding upon returning to work.

Ampere Isaac Petit (2003) conducted a descriptive cross sectional study on perception and knowledge on exclusive breastfeeding among women attending well baby clinic, in Mbarara Hospital, Uganda. An interview schedule was adopted to collect the data. Questions were given to collect the information and time spent for 20 minutes for each sample. From a total of 200 respondents, 69.8% exclusively breast fed their infant for six months, 12.3% for more than 6 months. The majority of the respondents, 73.8% knew that child must be supported with exclusive breastfeeding for 6months. The study revealed that the advantage of exclusive breastfeeding was perceived by 55.2% of the women. The most of the women (66%) perceived that exclusive breastfeeding has disadvantages if the duration of breastfeeding exceeds 18 months.

2. 2 Literature related to practice of mothers on infant feeding

Teka *et al*., (2015) conducted a study to assess the prevalence and determinants of exclusive breastfeeding practice among mothers in Enderta Woreda (district), Ethiopia. In Ethiopia, national breastfeeding practice is poor because of traditional, cultural beliefs and low educational levels. A community based cross-sectional study with multistage sampling method was used to select 541 mothers with children less than 24 months of age. Data was collected by using structured questionnaire. Bivariate and Multivariable logistic regression was used to check the associations and controlling confounding variables. The results showed that a total of

530 mothers with a response rate of 98%. The mean (± SD) age of the mothers was 26.9 *(*± 5.98*)* years. Majority of the mothers (70.2%) were practicing exclusive breastfeeding. Age of the mother (0.12: 95%), age of the child (0.52 95%) and postnatal care (2.68; 95%) were found statistically significant with exclusive breastfeeding. The study concluded that prevalence rate of exclusive breastfeeding was high in Enderta Woreda. The age of the mother, age of the child and receiving postnatal care were the determinant factors for exclusive breastfeeding in the study area.

Roshita A, Schubert E (2012) conducted a study to assess the child care and feeding practices of middle class working and non working Indonesian mothers in urban area. A qualitative approach to explore the socio-economic and cultural environments that may influence child-care practices in families of working and non-working mothers with children of different nutritional status and types of domestic caregiver was undertaken. The setting was Depok, a satellite city of Jakarta, Indonesia. Sample size was 26 middle class families. The children were categorized as underweight, normal weight and obese, and caregivers were grouped as family and domestic paid caregivers. Twenty-six mothers were interviewed. Data were analyzed by the constant comparative approach. The study identified five emerging themes, consisting of reason for working and non working, support for mother and caregivers was undertaken, decision maker on child food, maternal self-confidence and access to resources. It was confirmed that mothers and caregivers need support and adequate resources to perform child-care practices regardless of the child's nutritional and maternal working status.

Bagul AS, Supare MS *et al.,* (2011) study was conducted to assess the infant feeding practices in an urban slum and to determine influencing factors, in Nagpur, Maharashtra. The feeding practices during infancy are of critical importance for the growth and development of children. The sampling technique was cross-sectional and it was conducted in an urban slum of Nagpur, Maharashtra, during June 2011 to December 2011. The study variables were the mother's religion, occupation, education, the place of delivery, the sex and age of the baby, the antenatal clinical registration, breastfeeding weaning knowledge of the mothers etc. The questionnaire was administer to the mothers and collected the data. For the statistical analysis, the Fisher's exact test was used. The sample size was 384.Out of the 384

enrolled mothers, 125(32.56%) mothers had started breastfeeding within 1 hour after their deliveries. Colostrum was given by 82 (21.38%) mothers. Exclusive breastfeeding for 6 months was given by 142 (36.84%) mothers. The practice of exclusive breastfeeding was more in the literate mothers and in mothers who were informed by the health personnel and this was statistically significant. The study concluded that inappropriate feeding practices are common in the urban slum of Nagpur, Maharashtra.

Kankasa C, *et al.* (2010) conducted a study on Infants and young children feeding practices and nutritional status in two districts of Zambia. Appropriate feeding is important in improving nutrition and child survival. The aim of this study was to describe feeding practices and nutritional status among infants and young children (IYC) in two districts in Zambia: Kafue and Mazabuka. A cross-sectional study was conducted between January and March 2010 using both quantitative and qualitative methods. A questionnaire was administered to caregiver of children aged under 24 months. A total 634 caregivers participated in the study. Length and weight of all the children were measured. Focused group discussions were conducted regarding knowledge, attitude and practice related to infant feeding. About 54.0% of the caregiver knew the definition and recommended duration of exclusive breastfeeding and when to introduce complementary feeds. 81.2% respondents had acquired this knowledge from the health workers. Only 30.1% of the respondents practiced exclusive breastfeeding up to six months. 94.8% of the respondents reported that the child does not need anything other than breast milk in the first 3days of life, only 50.5% of them considered colostrum to be good. Complementary feeds were introduced early before 6months of age and were usually not of adequate quality and quantity. 64% caregivers knew that there would be no harm to the child if exclusively breastfed up to 6 months. Most of the children's nutritional status was normal though, 4.2% were severely stunted, 1.7% severely underweight and 0.5% severely wasted. The caregiver in the communities knew about the recommended feeding practices, but this knowledge did not translate into good practice.

Asif Khan, Radha R (2010) conducted a study to assess the breastfeeding and weaning practices in the rural mothers of Nagamangala Taluk, Mandya District. Mothers with children who were 9 months old and above who came to Bellur PHC for measles vaccination and booster doses of DPT and OPV were included in the study

and the data was collected using a pre-tested, structured questionnaire. Sampling technique was a cross- sectional study. Sample size was 80 mothers. Results were analyzed using Percentages, Chi Square test. 28% of the mothers initiated breastfeeding within 60 minutes of birth. Pre-lacteal feeds used were cow's milk, jaggery water and honey. Only 35% mothers breast fed their infants exclusively for the optimal duration of 6 months and 36% mothers weaned their infants prematurely. The most common weaning food was cow's milk. Study concluded that early breastfeeding pattern was found to be low and prevalence of exclusive breastfeeding and timely weaning was low.

Senthilvel V. *et al.*, (2007) conducted a study on Breastfeeding practices and factors influencing breastfeeding among the non-working postnatal mothers residing in rural community of Puducherry (Bahoor, rural area). Study design was cross-sectional study. Sample in the study was 100 non-working mothers. Descriptive Statistics, for association Chi-square test & Proportion were used and $p<0.05$ was taken to be statistically significant. 48% belonged to the age group of 25 – 29 years. 83 (83%) mothers practiced exclusive breast-feeding. 19% mothers fed prelacteal food to their Children. Only 28% mothers initiated complimentary food from 4-6 months. The association between introduction of pre-lacteals feeds and place of delivery was found to be statistically significant ($p<0.05$). The association between pre-lacteal feeds and educational status of mother was found to be statistically significant ($p<0.05$). 90% mothers received advice from the health workers. The study concluded that majority of women practiced exclusive breastfeeding. Complementary feeding from 4 – 6 months onwards which needs to be improved by organizing Information, through all available means by Government and Non-governmental agencies.

Razia Chaudhay (2006) conducted a study to assess the feeding pattern and weaning practices of mothers among infants in AIMC (Allama Iqbal medical college) residential colony, from May 2006 to September 2006. A total 50 mothers of infants from 6-12 months of age were included in the study. Their feeding pattern and weaning practices were studied using self-administered questionnaire and used convenient sampling technique. They were grouped in two categories according to their age of commencement of weaning. 42 (84%) infants were receiving weaning foods in addition to milk. Recommended age (6 months) was noticed in 42 cases

(84%), while delayed weaning was seen in 8 (16%). Timely weaning was noticed in 34 (68%) breastfed infants. Even if weaning was started at the correct age, several problems were observed. This included infrequent feeding, use of expensive commercial cereals given in diluted form instead of home prepared foods and improper food preparation practices. The quality, type and choice of food was not ideal for an adequate growth. Recommended weaning time (4-6 m) and delayed weaning, was analyzed in relation to socio-economic and demographic characteristics of the infant's mothers and their families. Delayed commencement of weaning had a statistical significant relationship with age, education, family income, occupation of father and mother, parity of mother and also large family size ($p<0.05$). Bottle-fed babies had significantly delayed weaning that is more than 9 months. Sex of the child was not significantly related to early or delayed weaning ($p>0.05$). Incorrect weaning practices are an issue of public health in developing countries. The study concluded that the identification and analysis of weaning practices prevalent in low socioeconomic households can lead to remedial strategies for improving the nutritional status of infants and, thereby, help to reduce infant mortality and morbidity rate.

Tarrant M, Fong DY, (2003) conducted a study on breastfeeding and weaning practices among mothers in Hong Kong. The aim of this study was to describe the breastfeeding and weaning practices of mothers of infant (1year) in Hong Kong and to determine the factors associated with early cessation of breastfeeding. The population was mothers of infant selected from the obstetric units of four public hospitals in Hong Kong in the immediate post-partum period and followed prospectively for 12 months or until weaned. Sample size was 1417.Data analysis done by using descriptive statistics to describe breastfeeding and weaning practices and multiple logistic regression to investigate the relationship between maternal characteristics and breastfeeding cessation. Results revealed that 1 month, 3 months, 6 months and 12 months infant (63%, 37.3%, 26.9%, and 12.5%) respectively were receiving breast milk; approximately one-half of breastfeeding mothers were exclusively breastfeeding. Younger mothers, those with a longer duration of residence in Hong Kong, and those returning to work were more likely to wean before 1 month. Mothers with higher education, previous breastfeeding experience, who were breastfed themselves and those who were planning to exclusively breastfeed and

whose husbands preferred breastfeeding were more likely to continue breastfeeding beyond 1 month. Breastfeeding promotion programs have been successful in achieving high rates of breastfeeding initiation but the focus must now shift to helping new mothers for giving exclusive breastfeeding and to sustain breastfeeding for longer.

Conclusion

The review of literature provided a valuable help in the development of the research study. Review of literature made a significant contribution to the understanding of the problem under study and developing insights into the problem.

CHAPTER III

RESEARCH METHODOLOGY

Methodology of research organizes all the components of the study in a way that is most likely to lead to valid answers to the sub problems that have been posed. **(Burns and Groove, 2002)**

This chapter explains the methodology adopted by the researcher for comparative study to assess the level of Knowledge and Practice on infant feeding among working and non-working mothers with the description of the research design, variables under study, setting of the study, population, sample size, sampling technique, development and description of the tool, pilot study, data collection, and the statistical analysis.

3.1 RESEARCH APPROACH

Research approach is a systematic, controlled, empirical, and critical investigation of natural phenomena guided by theory and hypotheses about the presumed relations among such phenomena. **(Dane 2003)**

A descriptive survey approach was used in this study as the study was aimed to assess the level of Knowledge and Practice on infant feeding among working and non-working mothers.

3.2 RESEARCH DESIGN

Research design is the master plan specifying the methods and procedures for collecting and analyzing the needed information in a research study. (**S.K Sharma 2005).**

Survey approach with Descriptive design was used to assess the level of Knowledge and Practice on infant feeding among working and non-working mothers.

3.3 VARIABLES IN THE STUDY

The variables in this study are mentioned below.

Research variable - **Knowledge** and **Practice** regarding infant feeding among working and non-working mothers of infant feeding.

3.4 SETTING OF THE STUDY

Setting is the physical location in which data collection takes place; can be natural, partially controlled, or highly controlled. The present study was conducted in two selected rural community areas namely Kodangipalayam and Somanur inTirupur district, Coimbatore Region, Tamil Nadu. The two communities were located within 8 km from each other. The common health problems such as inadequate feeding, fever, cough and cold, diarrhea, growth delay, unhygienic and malnutrition etc, was noticed among the infants in both the community areas. Kodangipalayam had a population of 2543. It has all basic facilities like school, sub center. The village health nurse resides in the community. For medical help the people approach the government hospital and primary health center in Somanur. Somanur had a population of 2,02,450. The people have basic facilities like school and a primary health center, electric and water facility, underground drainage system. Most of the mothers were working in the power loom.

3.5 TARGET POPULATION

The population of the study comprises of all working and non-working mothers within the age group of 18-35years having an infant in a selected community.

3.6 SAMPLE SIZE

Sample size refers to the number of subjects, events, behaviors, or situation that are examined in the study. (**S.K Sharma 2005)**

The sample of the present study consisted of 100 mothers who fulfilled the criteria (50 working mothers and 50 non-working mothers in a group).35 non-working mothers and 15 working mothers were selected from Area 1(Kodangipalayam) and 15 non-working and 35 working mothers were selected from Area 2 (Somanur).

3.7 SAMPLING TECHNIQUE

Samples who fulfilled the eligibility criteria were selected using Purposive Sampling Technique.

3.8 SAMPLING CRITERIA

Inclusion criteria

- Mothers who were in the age group of18 to 35 years.
- Working mothers and non - working mothers.
- Mothers are having infant with below one year of age.
- Who were willing to participate in the study.

Exclusion criteria

- Those who are not willing to participate in the study**.**
- Infants with any chronic diseases.
- Mothers those are having twin babies.

3.9 DESCRIPTION OF THE RESEARCH TOOL

The tool used in this study was a Structured Interview Schedule and the tool was organized in to 3 parts.

PART: I Demographic characteristics

The tool was used to gather personal information of mothers such as age, education, family income per month, occupation, religion and obstetrical history.

PART: II knowledge questions on infant feeding

1. Knowledge on breastfeeding
2. Knowledge on weaning

The purpose of the questions is to gather data on knowledge on infant feeding among the working and non-working mothers. There are 8 questions on knowledge about breast feeding and 7 questions on knowledge regarding weaning.

PART: III Practice questions on infant feeding

1. Practice on breastfeeding

2. Practice on weaning

The purpose of the questions is to gather data on practice on infant feeding among the working and non-working mothers. There are 6 questions on practice about breast feeding and 13 questions on practice regarding weaning.

3.10 SCORING AND INTERPRETATION

The knowledge questions consisted of 15 questions to assess the overall knowledge on breastfeeding and weaning. A score of 1 was given for **YES** and 0 for **NO.** The minimal sore was 0 and maximum score was 15. The scores were interpreted as follows

S. No	**Knowledge (overall)**	**Score**
1.	Poor	0-5
2.	Average	6-10
3.	Good	11-15

The practice questions consisted of 19 questions to assess the overall practice on breastfeeding and weaning. A score of 1 was given for **YES** and 0 for **NO.** The minimal sore was 0 and maximum score was 19. The scores were interpreted as follows

S. No	**Practice (overall)**	**Score**
1.	Poor	0-6
2.	Average	7-12
3.	Good	13-19

3.11 DEVELOPMENT OF THE TOOL

The tools were prepared on the basis of the objectives of the study, after an intense search of related literature, and the guidance of the experts in the field of Child Health Nursing. Simplicity of languages, organization and clarity of statement were the factors kept in mind while preparing the tool. The demographic data and

questionnaire regarding (Knowledge and Practice questions on infant feeding**)** were revised several times by consultation with experts until it reached the final stage. The tool was then drafted in English and translated into Tamil.

3.12 CONTENT VALIDITY OF THE RESEARCH TOOL

Content validity refers to the degree to which an instrument measures what it is intended to measure. **(Polit and Hungler, 1999)**

The research tools like Structured Interview Schedule, the objectives of the study were submitted to three experts in the field of Child Health Nursing. The three nursing experts were Professors with Master's Degree in Child Health Nursing and working in different Colleges of Nursing in Coimbatore with more than 5 years of experience. The validity of the tool was confirmed. On the basis of the suggestions given by the experts, rearrangement of the items in the selected area was done. (Food items according to month wise).The tool was translated and edited by a Tamil Professor in a private college in Coimbatore.

3.13 RELIABILITY OF THE RESEARCH

Reliability is the degree of consistency and accuracy with which an instrument measures the attribute for which it is design to measure. **(Suresh Sharma 2011)**

The reliability of the Structured Interview Schedule regarding Knowledge and Practice on infant feeding was done by test-retest method. The tool was administered to 8 mothers. The researcher administered the tool for the same sample after 20 days interval. The reliability was checked by Karl Pearson's correlation formula. The obtained 'r' value for Knowledge and Practice score was 0.715, 0.914 respectively which showed that tool was highly reliable and stable.

3.14 PILOT STUDY

The pilot study was conducted in one of the selected community area in Sulur, (Mathiazhagan Nagar) Coimbatore. 10 samples were taken for the pilot study (5 working and 5 non-working mothers).

The investigator made the mothers to sit comfortably and gave brief self-introduction. Investigator explained the nature of the study, established rapport,

obtained willingness and time availability. The data was collected with the structured interview schedule. Investigator asked the questions and provided adequate time to receive their responses and to recall their practice during the interview. The investigator thanked the mother at the end of the interview.

Using the same approach the investigator interviewed all the working and non-working mothers. The average time taken for completion of the interview was 45 minutes for each mother. The duration of the pilot study was 1 week. There was no difficulty in collecting the data during pilot study.

3.15 DATA COLLECTION METHOD

The main study was done in the selected rural community areas at Coimbatore Region. Prior permission was obtained from the Panchayat office in the respective community areas. The investigator visited the mothers in Kodangipalayam and Somanur and explained to them the purpose of the study. The respondents were assured the anonymity and confidentiality of the information collected from them. After obtaining their willingness, samples who fulfilled the criteria were selected by purposive sampling method. Investigator explained the nature of the study, established rapport, obtained willingness and time availability. The data was collected with the Structured Interview Schedule. Investigator asked the questions and provided adequate time to receive their responses and to recall their practice during the interview. Using the same approach the investigator interviewed all the working and non-working mothers. The average time taken for completion of the interview was 45 minutes in each mother. The duration of the data collection was one month (16.03.15 to 18.04.15). Investigator thanked the mother at the end of the interview.

100 samples were taken for the main data collection, 50 for working and 50 for non-working mothers (regarding Knowledge and Practice on infant feeding) from Kodangipalayam and Somanur.

3.16 PLAN FOR DATA ANALYSIS

The data obtained was analyzed using descriptive and inferential statistics.

Descriptive Statistics

Frequency and percentage distribution were used to analyze the demographic variables and to assess the level of Knowledge and Practice on infant feeding among working and non-working mothers.

Mean and mean score percentage was used to determine the difference in the level of Knowledge and Practice on infant feeding among working and non-working mothers.

Inferential Statistics

Unpaired "t" test was used to determine the significant difference between the level of Knowledge and Practice on infant feeding.

Correlation between the level of Knowledge and Practice among working and non-working mothers of infant feeding was determined by using Karl Pearson's co-efficient of correlation.

Chi square test was done to find the association between demographic characteristics and the level of Knowledge and Practice on infant feeding.

3.17 ETHICAL CONSIDERATION

Formal permission was obtained from concerned authority, Panchayat president of the community areas. The nature, purpose of study was explained and obtained the verbal consent from the samples. Privacy and comfort of the samples was maintained throughout the study. The mothers were given their own preference in choosing the time, without forcing or compelling them and without interfering with their regular activities. Adequate explanation was given whenever they asked questions. Records were made for each sample.

CHAPTER IV

ANALYSIS AND INTERPRETATION

Data analysis defined as "the systematic organization and synthesis of research data, and the testing of research hypothesis using those data and its interpretation as a process of making sense of the result of a study and examining their implications".**(James.A.Fain 2003)**

"Analysis is the process of organizing and synthesizing the data so as to answer research questions and test hypothesis. Data analysis is defined as the categorizing, ordering, manipulating and summarizing of data to reduce into intelligible and interpretable form".**(Kerlinger 1976)**

This chapter deals with the analysis and interpretation of the data collected from 50 working and 50 non-working mothers about knowledge & practice on infant feeding in selected community areas at Coimbatore.

The data have been analyzed and presented under the following headings

4.1 Demographic characteristics of the samples

The demographic data of the samples are presented in relation to demographics characteristics of mother and child such as age, educational status, family income, occupation, religion, type of delivery, No of children, Sex of the child, Age of the last child, maturity of the child in frequency and percentage.

4.2 Assessmentof the level of knowledge of working and non-working mothers.

Knowledge in two aspects (Breast feeding and Weaning) and also overall knowledge in three levels (Poor, Average, Good) of working and non-working mothers have been analyzed comparatively in frequency and percentage. The mean knowledge score and the significant difference between working and non-working motherswere analyzed by inferential statistics.

4.3Assessment ofthe level of practice of working and non-working mothers

Practice in two aspects (Breast feeding and Weaning) and also overall practice in three levels (Poor, Average, Good) of working and non-working mothers have been analyzed comparatively in frequency and percentage. The mean practice score and the

significant difference between working and non-working mothers were analyzed by inferential statistics.

4.4 Association of selected demographic characteristics with level of knowledge on infant feeding

This section presents the association of selected demographic characteristics with level of knowledge on infant feeding(Age, educational status, family income, occupation, religion, type of delivery, No of children, Sex of the child, Age of the last child, maturity of the child in frequency and percentage).

4.5Association of selected demographic characteristics with level of practice on infant feeding

This section presents the association of selected demographic characteristics with level of practice on infant feeding Age, educational status, family income, occupation, religion, type of delivery, No of children, Sex of the child, Age of the last child, maturity of the child in frequency and percentage).

4.1 Demographic characteristics of the samples

TABLE 4.1.1

FREQUENCY AND PERCENTAGE DISTRIBUTION OF WORKING AND NON WORKING MOTHERS RELATED TO DEMOGRAPHIC CHARACTERISTICS

(N=100)

S.No	Demographic Characteristics.	Working mothers (N=50)		Non-working mothers (N=50)	
		Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
1	Age in years				
	a)<18year	2	4.0	1	2.0
	b) 18-23years	24	48.0	20	40.0
	c) 24-29years	21	42.0	22	44.0
	d) 30-35years	3	6.0	7	14.0
2	Educational status				
	a) Illiterate	-	-	5	10.0
	b) Primary school	20	40.0	20	40.0
	c) Higher Secondary	23	46.0	22	44.0
	d) Collegiate	7	14.0	3	6.0
3	Family income				
	a)Rs.< 5000/	15	30.0	21	42.0
	b)Rs. 5000 - 10,000/	19	38.0	20	40.0
	c)Rs.>10,000/	16	32.0	9	18.0
4	Occupation				
	a) Housewife	–	–	50	100.0
	b)Govt-employee	32	64.0	–	–
	c) Private-employee	18	36.0	–	–
5	Religion				
	a) Hindu	38	76.0	46	92.0
	b) Muslim	10	20.0	1	2.0
	d) Christian	2	4.0	3	6.0
6	Type of Delivery				
	a) Normal	42	84.0	36	72.0
	b)Lscs	8	16.0	14	28.0

Table 4.1.1 presents the demographic characteristics of working and non-working mothers**.**

1. Age in years

Most of the mothers in both groups were in the age group between 18-23 years. Nearly half of the working and non-working mothers (42%,44%) were in the age group of 24-29 years, remaining6% of working mothers and 14%of non-working mothers were in the age group of 30-35 years.

2. Educational status

Nearly half of the working and non-working mothers had primary school education (40%), 46% of working mothers and 44% of non-working mothers had higher secondary education. whereas only 14% of working and 6% of non-working mothers had collegiate education.

3. Family income

38% of working mothers and 40% of non-working mothers had family income between Rs.5000/- and Rs.10,000/-respectively. 30% & 32% of working mothers and 42%, 18% of non-working mothers had <Rs.5000/-, >RS.10, 000/- as family income respectively.

4. Occupation

Majority of the working mothers (64%) are government employees.

5. Religion

Majority of the working mothers (76%) and non-working (92%) mothers belong to Hindu religion.

6.Type of delivery

Majority of the working mothers (84%) and non-working mothers (72%) had normal delivery.

TABLE 4.1.2

FREQUENCY AND PERCENTAGE DISTRIBITION OF DEMOGRAPHIC CHARECTERISTICS OF CHILDREN

(N=100)

S.No	Related to child	Working mothers (N=50)		Non-working mothers (N=50)	
		Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
1	**No. of children**				
	a) One child	14	28.0	21	42.0
	b)Two children	36	72.0	29	58.0
2	**Sex of the child**				
	a) Male	23	46.0	32	64.0
	b)Female	27	54.0	18	36.0
3	**Age of the last child**				
	a) 0-6 months	17	34.0	12	24.0
	b) 6-12 months	33	66.0	38	76.0
4	**Maturity of the child**				
	a) Full term	33	66.0	40	80.0
	b) Preterm	17	34.0	10	20.0

Table 4.1.2presents the demographic characteristics related to child of working and non-working mothers.

1. No .of children

Majority of working mothers (72%) and 58% of non-working mothers have two children.28% of working and 42% of non-working mothers have one child.

2. Sex of the child

Majority of non-working mothers (64%) and 46% of working mother's children are male. 54% of working and 36% of non-working mother's children are female.

3. Age of the last child

66% of working and 76% of non-working mother's last child's age was 6-12 months.

4. Maturity of the Child

66% of working and 80% of non-working mothers delivered a full term baby.

4.2 Assessment of level of knowledge of working and non-working mothers

TABLE 4.2.1

FREQUENCY AND PERCENTAGE DISTRIBUTION OF LEVEL OF KNOWLEDGE OF WORKING AND NON-WORKING MOTHERS ON INFANT FEEDING

(N=100)

Various aspects	Level of Knowledge	Working mothers (N=50)		Non-working mothers (N=50)	
		Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Breast feeding	Poor	32	64.0	3	6.0
	Average	18	36.0	25	50.0
	Good	0	0	22	44.0
Weaning	Poor	11	22.0	4	8.0
	Average	30	60.0	18	36.0
	Good	9	18.0	28	56.0

Table4.2.1 presents level of knowledge of working mothers and non-working mothers on infant feeding.

64% of working mothers and 6% of non-working mothers had poor knowledge on breast feeding. 50% of non-working mothers and 36% of working mothers had average knowledge. 44% of non-working mothers had good knowledge on breast feeding.

60% of working mothers and 36% of non-working mothers had average knowledge on weaning and 56% of non-working mothers and 18% of working mothers had good knowledge on weaning.

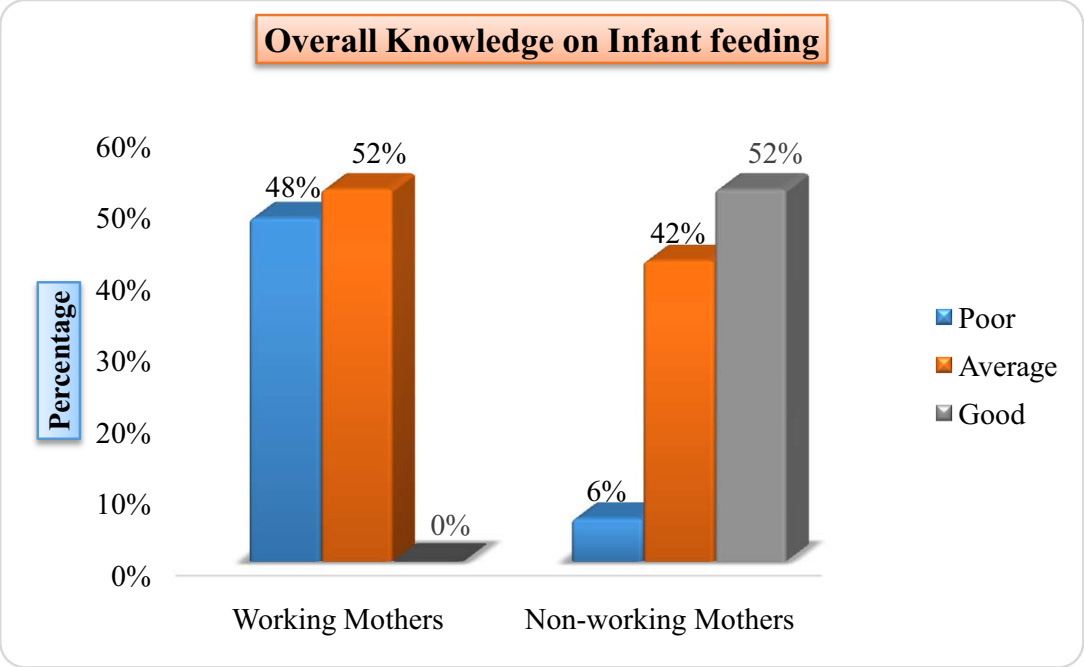


Figure 4.1 shows the overall knowledge of working and non-working mothers on infant feeding.

TABLE 4.2.2

MEAN KNOWLEDGE SCORE AND STANDARD DEVIATION OF WORKING AND NON WORKING MOTHERS IN VARIOUS ASPECTS OF INFANT FEEDING AND LEVEL OF SIGNIFICANCE

(N=100)

Knowledge		Working mothers			Non- working mothers				Un paired 't' value
Various aspects	Max score	Mean score	Mean Score %	SD	Mean Score	Mean Score %	SD	MD	p<0.05 df=98
Breast feeding	8	2.32	29.0	0.05	5.12	64.0	1.69	2.8	11.16*
Weaning	7	3.32	47.4	1.13	4.8	68.6	1.51	1.48	5.54*

***Significant. NS-Not significant** **Table value- 1.98**

Table 4.2.2 shows mean knowledge score and standard deviation of working and non-working mothers in various aspects of infant feeding and level of significance

In the working mothers the mean knowledge score percentage on breast feeding was 29%.Whereas in the non-working mothers the mean knowledge score percentage was 64%.

In the working mothers the mean knowledge score percentage on weaning was 47.4%. Whereas in the non-working mothers the mean knowledge score percentage on was 68.6%.

Statistically, there was a significant difference in mean knowledge score in various aspects of infant feeding among working and non-working mothers.

In the aspect of Breastfeeding with "t" = 11.16, ($P< 0.05$, df =98) and weaning with "t" = 5.54, ($P< 0.05$, df =98).

The mean knowledge score of the non-working mothers was more than the working mothers in the both aspects of breast feeding and weaning.

TABLE 4.2.3

COMPARISON OF OVERALL MEAN KNOWLEDGE SCORE AND STANDARD DEVIATION OF WORKING AND NON-WORKING MOTHERS ON INFANT FEEDING AND LEVEL OF SIGNIFICANCE

(N=100)

Groups	Max score	Mean score	Mean score%	SD	Unpaired "t" value p<0.05 df=98
Working mothers	15	5.64	37.6	1.26	11.11*
Non-working mothers	15	10	66.7	2.47	

***- Significant. NS-Not significant. Table value-1.98**

Table 4.2.3 shows the comparison of overall mean knowledge score and standard deviation of working and non-working mothers on infant feeding and level of significance.

The overall mean knowledge score on infant feeding for working mothers were 5.64(37.6%) Whereas mean knowledge score for non-working mothers were 10 (66.7%)

Statistically there was a significant difference in overall mean knowledge score between working and non-working mothers on infant feeding [‘t’= 11.11, (P<0.05, df = 98)].Hence **HO1** was rejected.

It indicates that non-working mothers had more knowledge than working mothers.

4.3. Assessment of level of practice of working and non-working mothers

TABLE 4.3.1

FREQUENCY AND PERCENTAGE DISTRIBUTION OF LEVEL OF PRACTICE OF WORKING AND NON-WORKING MOTHERS ON INFANT FEEDING

(N= 100)

Various aspects	Level of Practice	Working mothers (N=50)		Non-working others (N=50)	
		Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Breast Feeding	Poor	16	32.0	27	54.0
	Average	33	66.0	19	38.0
	Good	1	2.0	4	8.0
weaning	Poor	6	12.0	2	4.0
	Average	38	76.0	38	76.0
	Good	6	12.0	10	20.0

Table 4.3.1 presents the level of practice of working and non-working mothers on infant feeding.

66% of working mothers and 38% of non-working mothers had average practice on Breast feeding. 54% of non-working mothers and 32% of working mothers had poor practice. Only 8% of non-working mothers and 2% of working mothers had good practice on breast feeding.

76% of working and non-working mothers had average practice on weaning. 12% of working mothers and 10% of non-working mothers had good practice and 12% of working mothers and 4% of non- working mothers had poor practice on weaning.

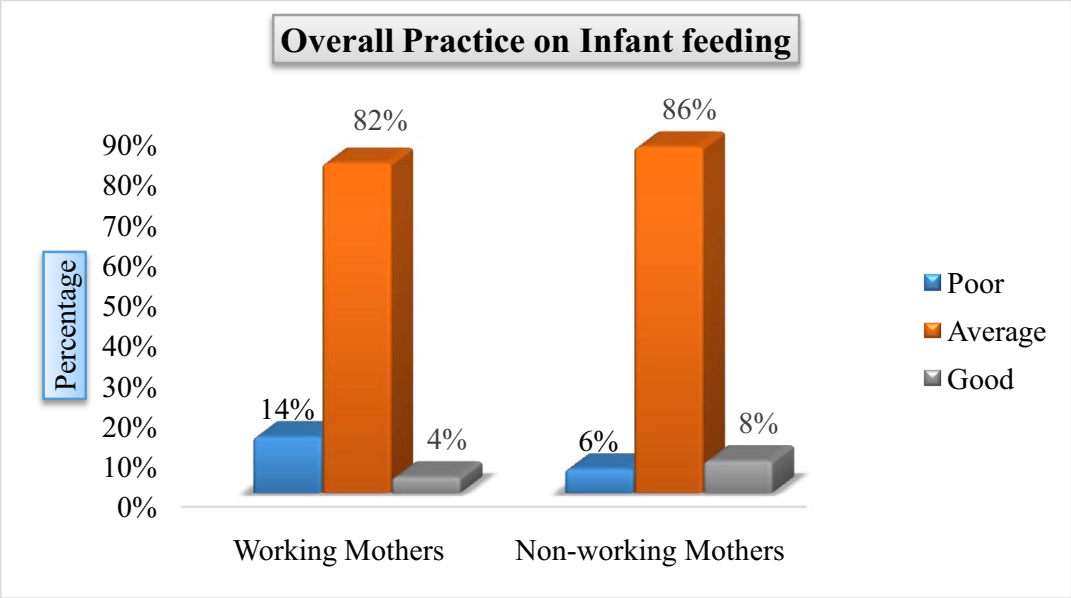


Figure 4.2 shows the overall practice of working and non-working mothers on infant feeding.

TABLE 4.3.2

MEAN PRACTICE SCORE AND STANDARD DEVIATION OF WORKING AND NON WORKING MOTHERS IN VARIOUS ASPECTS OF INFANT FEEDING AND LEVEL OF SIGNIFICANCE

(N=100)

Practice		**Working mothers (N=50)**			**Non- working mothers (N=50)**				**Un paired "t" value P < 0.05 df-98**
Various aspects	**Max score**	**Mean score**	**Mean Score %**	**SD**	**Mean Score**	**Mean Score %**	**SD**	**MD**	
Breast feeding	6	2.90	48.3	0.974	2.74	45.6	1.08	0.16	0.776NS
Weaning	13	6.04	46.4	1 .87	6.78	52.1	1.81	0.74	2.009NS

Significant.* NS-Not significant. **Table value- 1.98**

Table 4.3.2 shows mean practice score and standard deviation of working and non-working mothers in various aspects of infant feeding and level of significance

In the working mothers the mean Practice score percentage on breast feeding was 48.3%. Whereas in the non-working mothers the mean Practice score percentage was 45.6%.

In the working mothers the mean Practice score percentage on weaning was 46.4%. Whereas in the non-working mothers the mean Practice score percentage was 52.1%.

Statistically, there was a significant difference in mean Practice score in various aspects of infant feeding among working and non-working mothers.

In the aspect of Breastfeeding "t"= 0.776, (P< 0.05, df =98) and weaning with "t" = 2.009 (P< 0.05, df =98).

The mean practice score of the working mothers on breast feeding was high than non-working mothers and the mean practice score of non -working mothers on weaning was high than the working mothers.

TABLE 4.3.3

COMPARISON OF OVERALL MEAN PRACTICE SCORE AND STANDARD DEVIATION OF WORKING AND NON WORKING MOTHERS ON INFANT FEEDING AND LEVEL OF SIGNIFICANCE

(N=100)

Groups	Max score	Mean score	Mean score%	SD	Unpaired "t" value p<0.05 df=98
Working mothers	19	8.94	47.0	2.40	1.26 NS
Non-working mothers	19	9.52	50.1	2.20	

***-Significant. NS-Not significant.** **Table value- 1.98**

Table 4.3.3 shows the comparison of overall mean Practice score and standard deviation of working and non-working mothers on infants feeding and level of significance.

The overall mean practice score on infant feeding for non-working mothers were 9.52 (50.1%),Whereas mean practice score for working mothers were 8.94 (47.0%).

Statistically there was no significant difference in overall mean practice score between working and non-working mothers "t" value = 1.26,($P<0.05$, df = 98).Hence, **HO2** was accepted.

It indicates that working and non-working mothers had almost same mean practice score on infant feeding.

4.4 Association of selected demographic characteristics with the level of knowledge on infant feeding

TABLE 4.4

ASSOCIATION OF SELECTED DEMOGRAPHIC CHARECTERISTICS WITH LEVEL OF KNOWLEDGE ON INFANT FEEDING

(N= 100)

S.No	Demographic Characteristics	Level of Knowledge			χ^2 value	χ^2 table value P<0.05
		Poor	Average	Good		
1	Age in years					
	a) ≤ 23 years	16	21	16	2.491	5.99
	b)≥ 23 years	11	26	16	NS	Df =2
2.	Educational Status					
	a) illiterate	1	4	0		
	b) Primary	10	18	12	1.39	7.49
	c) Higher Secondary	14	19	12	NS	Df=4
	d) Collegiate	2	6	2		
3	Family Income					
	a) < 5,000/-	8	19	9	2.182	7.49
	b) 5,000/- 10,000/-	10	17	12	NS	Df=4
	c) ≥ 10,000/-	9	11	5		
4	Occupation					
	a) House wife	3	21	26	42.87	5.99
	b) Working	24	26	0	*	Df= 2
5	No.of children					
	a) One child	7	17	11	1.616	5.99
	b) Two children	20	30	15	NS	Df =2
6	Sex of the Child					
	a)Male	14	25	16	0.619	5.99
	b) Female	12	22	10	NS	Df=2
7	Age of last child					
	a) 0-6 months	9	16	4	3.168	7.49
	b) 6-12 months	18	31	22	NS	Df= 4
8	Type of delivery					
	a) Normal	25	35	18	4.857	7.49
	b) Lscs	2	12	8	NS	Df= 4
9	Maturity of child					
	a) Full term	17	36	20	1.891	5.99
	b) Preterm	10	11	6	NS	Df = 2

NS=Not Significant*Significant

Table 4.4 presents the association between the demographic characteristics and the level of knowledge of working and non-working mother's on infant feeding.

There was a significant association between the occupation of mothers and the level of knowledge on infant feeding (χ^2=42.87, P< 0.05, df =2, t value=5.99) and there was no association between the other demographic characteristics and the knowledge of working and non-working mothers on infant feeding.

4.5 Association of selected demographic characteristics with the level of practice on infant feeding

TABLE 4.5

ASSOCIATION OF SELECTED DEMOGRAPHIC CHARACTERISTICS WITH LEVEL OF PRACTICE ON INFANT FEEDING

(N=100)

S.No	Demographic Characteristics	Level of Practice			χ^2 value	χ^2 table value P<0.05
		Poor	Average	Good		
1	Age in years					
	a) ≤ 23 years	6	40	1	2.91	5.99
	b)≥ 23 years	4	44	5	NS	Df=2
2.	Educational Status					
	a) illiterate	0	5	0		
	b)Primary	6	32	2	1.586	5.99
	c) Higher Secondary	4	47	4	NS	Df=2
3	Family Income					
	a) < 5,000/-	3	30	3	2.96	9.49
	b)5,000/- 10,000/-	6	31	2	NS	Df=4
	c) ≥ 10,000/-	1	23	1		
4	Occupation					
	a)House wife	3	43	4	2.314	5.99
	b) Working	7	41	2	NS	Df=2
5	No. of children					
	a)One child	4	29	2	0.126	5.99
	b) Two children	6	55	4	NS	Df =2
6	Sex of Child					
	a)Male	3	50	2	4.36	5.99
	b) Female	7	34	4	NS	Df=2
7	Age of last child					
	a) 0-6 months	5	23	1	2.69	5.99
	b) 6-12 months	5	61	5	NS	Df=2
8	Type of delivery					
	a) Normal	7	66	5	0.488	5.99
	b)LSCS	3	18	1	NS	Df= 2
9	Maturity of child					
	a) Full term	8	61	4	0.377	5.99
	b) Preterm	2	23	2	NS	Df = 2

NS= Not Significant

Table 4.5presents the association between the demographic characteristics and the level of Practice of working and non-working mothers on infant feeding.

There was no association found between the level of practice and selected demographic characteristics of working and non-working mothers (age, educational status, family income, occupation, number of children, sex of child, age of last child, type of delivery, and maturity of child).

CHAPTER- V

DISCUSSION

The discussion brings the research to closure section. It makes sense of the research results. This is the most important section of any research report. The discussion section may be presented in precise and concise language avoiding research jargons**. (Hays 1992, Klison 1985)**

The study focused to assess and compare the level of Knowledge and Practice on infant feeding among working and non-working mothers by Structured Interview Schedule in selected community areas at Coimbatore.

5.1 Demographic characteristics of the samples and the children

Table 4.1.1 Most of the mothers in both groups were in the age group between 18-23 years. Nearly half of the working and non-working mothers (42%, 44%) belonged to the age group of 24-29 years. Among the working and non-working mothers had (40%) primary school education, 46% of working mothers and 44% of non-working mothers had higher secondary education. Whereas only 14% of working and 6% of non-working mothers had collegiate education. 38% of working mothers and 40% of non-working mothers had family income between Rs.5000/- and Rs.10,000/- respectively. Majority of the working mothers (64%) are government employees. Majority of the working mothers (76%) and non-working (92%) mothers belong to Hindu religion. Majority of the working mothers (84%) and non-working mothers (72%) had normal delivery.

Majority of working mothers 72% and 58% of non-working mothers are having two children, remaining 28% of working and 42% of non-working mothers are having one child. Majority of non-working mothers 64% and 46% of working mother's children are males and rest of the mothers are having female children. 66% of working and 76% of non-working mother's last child's age is 6-12 months and 66% working and 80% of non-working mothers delivered a full term baby.

5.2 Assessment of level of Knowledge of working and non-working mothers on Infant Feeding.

Table 4.2.1 64% of working mothers and 6% of non-working mothers had poor knowledge on breast feeding. 50% of non-working mothers and 36% of working

mothers had average knowledge and 44% of non-working mothers had good knowledge on breast feeding.

60% of working mothers and 36% of non-working mothers had average knowledge and 56% of non-working mothers and 18% of working mothers had good knowledge on weaning.

The above results were supported by a study done by **Mohammad Khassawneh.et.al (2003)** a study on knowledge of infant feeding in the north of Jordan. Unemployed women had 8.3% of poor, 50.3% of average and 22.4% good knowledge on infant feeding. Employed women had 32% of poor, 20% of average knowledge on infant feeding compared to unemployed women.

Mean knowledge score

Table 4.2.2 The overall mean knowledge score on infant feeding for working mothers were 5.64 (37.6%) whereas mean knowledge score for non-working mothers were 10 (66.7%)

Statistically there was a significant difference in overall mean knowledge score between working and non-working mothers on infant feeding ['t'= 11.11, ($P<0.05$, df = 98)].Hence **Ho1**was rejected.

It indicates that non-working mothers had more knowledge than working mothers.

Comparative study conducted by **Priyanka Soni, *et al.,* (2011)** on knowledge of breastfeeding among working and non-working mothers. The findings showed that 66% of non-working mothers had knowledge as compared to 30% of working mothers. Working mothers were more likely to stop breastfeeding than non-working mothers. The most important reason for working mothers stopping breastfeeding was attributed to their work.

5.3 Assessment of level of Practice of working and non-working mothers on Infant Feeding.

Table 4.3.1 66% of working mothers and 38% of non-working mothers had average practice on breastfeeding. 54% of non-working mothers and 32% of working mothers had poor practice. Only 8% of non-working mothers and 2% of working mothers had good practice of breastfeeding.

76% of working and non-working mothers had average practice on weaning. 12% of working mothers and 10% of non-working mothers had good practice and 12% of working mothers and 4% of non- working mothers had poor practice on weaning.

Mean Practice score

Table 4.3.3 The overall mean practice score on infants feeding for non-working mothers were 9.52 (50.1%). Whereas mean practice score for working mothers were 8.94 (47.0%).There was no significant difference in overall mean practice score between working and non-working mothers ['t' value =1.26, P<0.05, df = 98)].Hence, **HO2** was accepted.

It indicates that non-working and working mothers had almost same level of practice on infant feeding.

5.4 Association of selected demographic characteristics with the level of knowledge on infant feeding.

There was a significant association between the occupation of mothers and the level of knowledge on infant feeding (χ^2=42.87, P< 0.05, df =2, "t" value =5.99) and there was no association between the other demographic characteristics and the knowledge of working and non-working mothers on infant feeding.

A study was conducted by **Abul-fadal (2003)** to assess the knowledge regarding infant feeding among mother of infants at a selected hospital. There was no association between the demographic characteristics on knowledge of infant feeding among unemployed and employed women for the variables like age, educational status, number of children, sex of child, age of last child, type of delivery, and maturity of child. But there was a significant association between the occupation, family income, of mothers and the level of knowledge on infant feeding.

5.5 Association of selected demographic characteristics with the level of Practice on infant feeding

There was no association found between the level of practice and selected demographic characteristics of working and non-working mothers (age, educational status, family income, occupation, number of children, sex of child, age of last child, type of delivery, and maturity of child.).

A study conducted by **Sushma Sriram**, ***et al*.**, **(2013)** on practice of mothers regarding infant feeding, the study concluded that there was no association found between the practice and demographic characteristics of working and non-working mothers.

CHAPTER- VI

SUMMARY, CONCLUSION, IMPLICATION AND RECOMMENDATIONS

This chapter presents the summary of the study, summary of the findings, conclusion, implications and recommendations.

6.1 SUMMARY OF THE STUDY

The aim of the study was to assess and compare the level of Knowledge and Practice on Infant Feeding among working and non-working mothers by Structured Interview Schedule in selected community areas.

The Conceptual frame work used for this study was based on modified Health Belief model **(Rosenstock, 1999).** Survey approach with descriptive design was used to assess the level of Knowledge and Practice on infant feeding among working and non-working mothers. The variables were knowledge and Practice regarding infant feeding among working and non-working mothers. The study was conducted in two selected community areas namely Kodangipalayam and Somanur in Tirupur district at Coimbatore region. The study was conducted for 30 days. Samples were selected using Purposive sampling technique. The samples of the study consisted of 100 mothers (50 working mothers and 50 non-working mothers).The data were collected using a Structured Interview Schedule and the tool was organized in 3 parts. (Demographic characteristics, Knowledge and Practice questions on Infant Feeding).The content validity of the tool was done by 3 experts in the field of Child Health Nursing. The reliability of the tool regarding Knowledge and Practice on infant feeding was done by test-retest method. Data analysis and interpretation was done by using descriptive and inferential statistics.

6.2. SUMMARY OF THE FINDINGS

6.2.1 Demographic characteristics of the samples and the children

Most of the mothers in both groups were in the age group between 18-23 years. Nearly half of the working and non-working mothers (42%, 44%) were belong to the age group of 24-29 years. Among them the working and non-working mothers had primary school education (40%), 46% of working mothers and 44% of non-working mothers had higher secondary education. Whereas only 14% of working and 6% of non-working mothers had collegiate education. 38% of working mothers and

40% of non-working mothers had family income between Rs.5000/- and Rs.10,000/- respectively. Majority of the working mothers (64%) are government employees. Majority of the working mothers (76%) and non-working (92%) mothers belong to Hindu religion. Majority of the working mothers (84%) and non-working mothers (72%) had normal delivery.

Majority of working mothers (72%) and 58% of non-working mothers are having two children remaining 28% of working and 42% of non-working mothers are having one child. Majority of non-working mothers (64%) and 46% of working mother's children are male child and rest of the mothers having female children. 66% of working and 76% of non-working mother's last child's age is 6-12 months and 66% working and 80% of non-working mothers delivered a full term baby.

6.2.2 Level of knowledge on infant feeding among working and non-working mothers

Overall Knowledge

52% of working mothers and 42% of non-working mothers had average knowledge. 48% of working mothers and 6% of non-working mothers had poor knowledge and (52%) non-working mothers had good knowledge on infant feeding.

Various aspects of Knowledge

64% of working mothers and 6% of non-working mothers had poor knowledge on breast feeding. 50% of non-working mothers and 36% of working mothers had average knowledge. 44% of non-working mothers had good knowledge on breast feeding.

60% of working mothers and 36% of non-working mothers had average knowledge on weaning and 56% of non-working mothers and 18% of working mothers had good knowledge on weaning.

6.2.3 Level of practice on infant feeding among working and non-working mothers

Overall Practice

Majority of the working mothers (82%) and non-working mothers (86%) had average practice.14% of working mothers and 6% of non-working mothers had poor

practice and remaining 8% of non-working mothers and 4% of working mothers had good practice on infant feeding.

Various aspects of Practice

66% of working mothers and 38% of non-working mothers had average practice on breast feeding. 54% of non-working mothers and 32% of working mothers had poor practice. Only 8% of non-working mothers and 2% of working mothers had good practice on breast feeding.

76% of working and non-working mothers had average practice on weaning. 12% of working mothers and 10% of non-working mothers had good practice and 12% of working mothers and 4% of non- working mothers had poor practice on weaning.

Significant findings

- There was a significant difference in overall mean knowledge score between working and non-working mothers on infant feeding with "t" = 11.11, ($P<0.05$, df = 98).
- There was a significant difference in mean knowledge score in various aspects of infant feeding. Breastfeeding with "t" = 11.16, ($P< 0.05$, df =98), weaning with "t" =5.54, ($P< 0.05$, df =98).
- There was no significant difference in overall mean practice score between working and non-working mothers "t" =1.26, ($P<0.05$, df = 98).
- There was a significant difference in mean practice score in various aspects of infant feeding. Breastfeeding with "t" = 0.776, ($P< 0.05$, df =98), weaning with "t" = 2.009, ($P< 0.05$, df =98).
- There was a significant association between the occupation of mothers and the level of knowledge on infant feeding (χ^2=42.87, $p< 0.05$, df =2, "t" value=5.99).
- There was no association found between the level of practice and other demographic characteristics of working and non-working mothers.

6.3 CONCLUSION

The findings of the study concluded that non-working mothers had more knowledge than working mothers on infant feeding. Whereas both working and non-working mothers had almost same level of practice on infant feeding.

6.4 IMPLICATIONS

The finding of the study have an implication for Nursing education, Nursing Practice, Nursing Administration and Nursing Research.

6.4.1 Nursing Education

The nursing staff and students should be taught about the importance of educating and supervising the mothers regarding the Knowledge and Practice of infant feeding. The nurse educator should create awareness of breastfeeding techniques and supervise the practices of weaning.

6.4.2 Nursing Practice

Health education is one of the responsibilities of nurses. During community health programmes, nurses get an opportunity to give information to the mothers and the family members regarding feeding techniques. Education about malnutrition and growth delay should be considered important during community health programme. It is necessary to conduct programmes to impart the knowledge and practice on infant feeding to the mothers.

6.4.3 Nursing Administration

The nurse administrators should necessarily involve in formulating policies for health education program in schools and community areas. The nurse administrator should take more responsibility to implement various awareness programs regarding infant feeding.

6.4.4 Nursing Research

An extensive research is necessary regarding infant feeding. The findings of the study will help to expand the scientific body of knowledge upon which further research can be conducted.

6.5 Recommendations

- A replication of the present study can be done with large sample.
- A comparative study can be conducted between rural and urban mother's knowledge and Practice of infant feeding.
- Mother's knowledge and Practice can be assessed after giving self instructional module.

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Appendix-1

LETTER REQUESTING PERMISSION TO CONDUCT THE STUDY

To

The Block medical officer,

Primary health center,

Somanur.Tirupur.

Sub: Letter requesting permission for conducting the study.

Respected Sir / Madam,

Mrs. T.Vajramala is a postgraduate nursing student of our institution. She has selected the below mentioned topic for her research project to be submitted to Dr.MGR Medical University of Health Science as a partial fulfillment of Master Nursing degree.

"Comparative study to assess the level of Knowledge and Practice on Infant Feeding among working and non-working mothers in selected community areas at Coimbatore".

Regarding this project, she is in need of your esteemed help and co-operation as she is interested in conducting a study in the school. I request you to kindly permit her to conduct the proposed study and provide her the necessary facilities.

The student will furnish further details of the study if required personally. Please do the needful and oblige.

Thanking You

Yours Faithfully,

Place:

Date:

Appendix-2

LETTER FOR PERMISSION GRANTED

R.V.S. COLLEGE OF NURSING
RVS INSTITUTE OF HEALTH SCIENCES
242-B, Trichy Road, Sulur, Coimbatore - 641402.
Ph : 0422-2687421, 2687480, 2687603, Fax : 0422-2687604
www.nursing.rvshs.ac.in
(Affiliated to the TN Dr. M.G.R Medical University, Chennai)
Recognized by the Indian Nursing Council, New Delhi.)

Mrs.Saramma Samuel
Principal

Ref No. Date.....

BN-5/NSG/2015 - 02 10.03.2015

To
The Block medical Officer,
Primary health center,
Somanur.

Respected Sir/Madam,

Ms. T. Vajramala is a Post Graduate Nursing student of our College. She has selected the below mentioned topic for her research project to be submitted to Dr. MGR Medical University as a practical fulfillment of Master Nursing Degree.

"Comparative study to assess the level of knowledge and practice on infant feeding among working and non working mothers in selected areas community at Coimbatore."

Regarding this project, she is in need of your esteemed help and cooperation as she is interested in conducting the study, in the community. I request you to kindly grant her permission for the same and oblige.

The student will furnish further details of the study if required personally.

Thanking You

Permitted.
S.D. Ravi Kumar
BLOCK MEDICAL OFFICER.
UPGRADED GOVT. PRIMARY HEALTH CENTRE
SOMANUR - 641 668.

Yours faithfully,

SARAMMA SAMUEL
PRINCIPAL
R.V.S. COLLEGE OF NURSING
242/B, TRICHY ROAD,
SULUR, COIMBATORE - 641 402

Appendix-3

LETTER REQUESTING PERMISSION TO CONDUCT THE STUDY

To

The village president,

Kodangipalayam,

Tirupur.

Sub: Letter requesting permission for conducting the study.

Respected Sir / Madam,

Mrs. T.Vajramala is a postgraduate nursing student of our institution. She has selected the below mentioned topic for her research project to be submitted to Dr.MGR Medical University of Health Science as a partial fulfillment of Master Nursing degree.

"Comparative study to assess the level of Knowledge and Practice on Infant Feeding among working and non-working mothers in selected community areas at Coimbatore".

Regarding this project, she is in need of your esteemed help and co-operation as she is interested in conducting a study in the school. I request you to kindly permit her to conduct the proposed study and provide her the necessary facilities.

The student will furnish further details of the study if required personally. Please do the needful and oblige.

Thanking You

Yours Faithfully,

Place:

Date:

Appendix-4

LETTER FOR PERMISSION GRANTED

R.V.S. COLLEGE OF NURSING
RVS INSTITUTE OF HEALTH SCIENCES
242-B, Trichy Road, Sulur, Coimbatore - 641402.
Ph : 0422-2687421, 2687480, 2687603, Fax : 0422-2687604
www.nursing.rvshs.ac.in
(Affiliated to the TN Dr. M.G.R Medical University, Chennai)
Recognized by the Indian Nursing Council, New Delhi.)

TÜVRheinland CERT ISO 9001

Mrs.Saramma Samuel
Principal

Ref No. Date.....

BN-5/NSG/2015 - 02 10.03.2015

To
The village president
Kodangipalayam
Tiruppur.

Respected Sir/Madam,

Ms. T. Vajramala is a Post Graduate Nursing student of our College. She has selected the below mentioned topic for her research project to be submitted to Dr. MGR Medical University as a practical fulfillment of Master Nursing Degree.

"Comparative study to assess the level of knowledge and practice on infant feeding among working and non working mothers in selected areas community at Coimbatore."

Regarding this project, she is in need of your esteemed help and cooperation as she is interested in conducting the study, in the community. I request you to kindly grant her permission for the same and oblige.

The student will furnish further details of the study if required personally.

Permited

Thanking You

Yours faithfully,

SARAMMA SAMUEL
PRINCIPAL
R.V.S. COLLEGE OF NURSING
242/B, TRICHY ROAD,
SULUR, COIMBATORE - 641 402

Appendix – 5

PERMISSION LETTER FOR CONTENT VALIDITY

From

Reg.No……

II Year MSc (N)

R.V.S College of Nursing,

R.V.S Institute of Health Sciences,

Sulur, Trichy road, Coimbatore.

To

Through the Principal

Respected Madam / Sir

Sub: Request for opinions and suggestions of experts for establishing content validity of research tool.

I am a Master of Nursing student in RVS College of Nursing, Sulur in the Specialty of Child Health Nursing. As per the requirement for the partial fulfillment of the Master of Nursing degree under the Tamil Nadu Dr.MGR Medical University, I have selected the following topic for dissertation **"Comparative study to assess the level of Knowledge and Practice on Infant Feeding among working and non-working mothers in selected community areas at Coimbatore"**. I humbly request you to kindly validate the tool and give your valuable suggestion.

Thanking You Yours sincerely

Enclosures: 1. Statement of the problem Reg.No:

2. Objectives of the study

3. Research tool.

4. Content validation certificate.

Appendix – 6

CERTIFICATE OF CONTENT VALIDITY

This is to certify that Tool developed by Mrs.T.Vajramala, M.Sc Nursing II year student, R.V.S. College of Nursing, Sulur, Coimbatore to collect data on the problem, **"Comparative study to assess the level of Knowledge and Practice on Infant Feeding among working and non-working mothers in selected community areas at Coimbatore"**. is validated by the undersigned and she can proceed with this tool to conduct the main study.

Name :

Designation :

Institution:

Signature :

Seal :

Date :

LIST OF EXPERTS

NURSING EXPERTS

1. **Mrs. Mabel Kuruvilla**
   Governing council member
   RVS College Of Nursing
   Sulur, Coimbatore

2. **Mrs.Mahalakshimi, M.Sc (N)**
   Professor
   Department Child Health Nursing
   KMCH College Of Nursing
   Coimbatore.

3. **Mrs.Vijayalakshimi.V, M.Sc (N)**
   Professor
   Department Child Health Nursing
   KMCH College Of Nursing
   Coimbatore.

RESEARCH TOOL

STRUCTURED INTERVIEW SCHEDULE

INTRODUCTION:

Breast milk provides the main source of nourishment during the first year of infant's life. The ideal food for the young infant is human milk, which has the specific characteristics that match the growing infant's nutritional requirements.

One of the most ignorant areas of infant care among mothers is infant feeding and weaning. The right knowledge and practice of infant feeding will protect the infant from many childhood diseases. Hence a structured interview schedule has prepared to assess the level of knowledge and practice of mothers regarding infant feeding and weaning.

PURPOSE:

The purpose of the study is to know the level of Knowledge and Practice on Infant Feeding among working and non-working mothers.

The research tool consists of the following sessions….

PART I - Demographic data

PART II– Knowledge of Infant Feeding

1. Knowledge on breastfeeding.
2. Knowledge on weaning.

PART III - Practice on Infant Feeding

1. Practice on breastfeeding.
2. Practice on weaning.

PART -I

Demographic Data:

1. Sample no: ☐

2. Age: ☐

1. <18year
2. 18-23years
3. 24-29years
4. 30-35years

3. Educational status ☐

1. Illiterate
2. Primary school
3. Secondary school
4. Collegiate

4. Family income per month ☐

1. <Rs 5000/-
2. 5000-1000/-
3. >10,000/-

5. Occupation ☐

1. House wife
2. Government –employee
3. Private-employee

6. Religion ☐

1. Hindu
2. Muslim
3. Christian

7. Obstetrical history

1. Gravida: ……..
2. No. of live children: ……..
3. Sex of the child: …….
4. Age of the last child: …….
5. Type of delivery - Normal /Lscs: ……
6. Full term/Preterm: …….

PART- II

I. Knowledge of Breast Feeding

1. The first feeding for the new born after delivery is ☐

    1. Boiled and cool water
    2. Honey
    3. Breast milk
    4. Sugar water

2. The first milk after delivery is ☐

    1. Yellowish milk that contains antibodies
    2. Watery milk
    3. White milk
    4. Sticky milk

3. Exclusive breastfeeding means feeding of ☐

    1. Milk with occasional water
    2. Breast milk with supplementary feed
    3. Breast milk with glucose water
    4. Breast milk alone

4. Sign of adequate breastfeeding to the baby is ☐

    1. Baby sleeping all the time
    2. Passing urine 8-10 times per day
    3. Baby sleeping during feeds
    4. Baby dose not cry often

5. How should you clean your breast before feeding the baby ☐

    1. Clean with soap and water
    2. Wipe with hands
    3. Wipe with wet cloth
    4. Clean with hot water

\6. The first Breast milk is very rich in ☐

1. Antibodies
2. Fats
3. Vitamins
4. All the above

7. Advantage of breastfeeding

1. provide immunity to the baby
2. Reduce the weight of the baby
3. Cause over weight of the baby
4. Early eruption of teeth in the baby

8. The type of feed which help the baby to sleep long hours is ☐

1. Bottle feed
2. Breast feed
3. Bottle and breast feed
4. Other feed (cow milk)

II. Knowledge on weaning and infant feeding

1. Complementary feeding means ☐

1. Only breast milk
2. Transition from breast milk to family food
3. Only family food
4. None of the above.

2. The correct time for starting the weaning is ☐

1. After 4 months of birth
2. After 6 months of birth
3. After 1 year of birth
4. At any time after birth

3. Types of the complementary feed that can be given to infants after 6 months are ☐

1. Semi solid food and breast feeding

2. Formula feeding
3. Cow's milk and biscuit
4. Breastfeeding alone.

4. Type of feeds during 7-9 months should tobe given to the infant ☐
   1. Family diet
   2. Only breast feed
   3. Cow's milk and biscuit
   4. Cereals and vegetables (mashed)

5. The type of feeds during 10-12 months should tobe given to the infant ☐
   1. Breast milk alone
   2. Semi solid diet
   3. Family diet
   4. Liquid diet

6. The problems infants will have in delayed weaning is ☐
   1. Malnutrition
   2. Obesity (weight gain)
   3. Anorexia
   4. Frequent fever

7. Initiation of weaning can be avoided if ☐
   1. Mother and child becomes ill
   2. Family function/ festival
   3. Enough breast milk secretion
   4. Family members wish and pressure

PART –III

I. Practice on Breast feeding

1. Breast feeding should be initiated ☐

    1. Within half an hour of birth
    2. Within one hour of birth
    3. Within two hours of birth
    4. Immediately after birth

2. The part of the breast which should be in the baby's mouth while feeding is ☐

    1. Nipple alone
    2. Nipple and most part of the breast
    3. Nipple and part of the areola
    4. Whole breast.

3. The sign of good attachment to the breast feeding is ☐

    1. Baby mouth wide open
    2. Baby chin touches the breast
    3. Baby cheeks are full and not hallow
    4. All the above

4. Regurgitation of the milk can be avoided by ☐

    1. Burping
    2. Keeping the baby on the lap
    3. Keeping the baby on its abdomen
    4. Keeping the baby in straight on its back

5. The correct position of the baby during breastfeeding is ☐

    1. Baby's head held on the palm of the mother
    2. Baby's head turned to the breast
    3. Baby's head and body facing upward
    4. Baby's head and body turn towards the breast

6. Exclusive breastfeeding should be continued up to ☐

1. 6 months
2. 1 year
3. 2 years
4. 2 ½ years

II. Practice on weaning

1. During weaning new food item must be selected in ☐

1. Large quantity in one meal
2. One item at a time for a week
3. Different liquids alone must be fed
4. Variety of food items in each meal

2. During introduction of new food items mother must observe infant for ☐

1. Rashes in the body
2. Diarrhea
3. Constipation
4. All the above

3. lf baby refuse breastfeeding during weaning process what the mother can do ☐

1. Stop breastfeeding
2. Stop weaning food
3. Give breast feeding and start weaning slowly
4. Don't know

4. Before giving feeding the mother must ☐

1. Wash hands only before feeding
2. Wash hands only after feeding
3. Wash hands before and after feeding
4. Mother need not wash her hands

5. Utensils used for feeding should be cleansed with ☐

1. Disinfectant solution
2. Tap water
3. Hot water
4. Boiling the utensils

6. After each feed during weaning the baby must be given ☐

1. Boiled and cooled water to drink
2. Tea and coffee
3. Soft drinks
4. None of the above

7. The quality of weaning food must be ☐

1. Over cooked items
2. Raw items
3. Semi cooked items
4. Well cooked items

8. The child must be fully weaned by the time ☐

1. The baby is 4years old
2. The baby is 3years old
3. The baby is 2years old
4. The baby is 1years old

9. Food items during 6 months ☐

1. Mashed potato and carrot
2. Fruit juice
3. Ragi kanji
4. All the above

10. Mother must keep this in her mind while giving feeding ☐

1. Start with small quantity (1- teaspoon full)
2. Don't add salt or sugar
3. Don't force to eat
4. All the above

11 .Food items given during 7-8 months ☐

1. Ragi kanji/wheat kanji
2. Vegetable soup and fruit juice
3. Above items with breast milk
4. Only breast milk

12. Food items given during 9-10 months ☐

1. Rice with dal
2. Non –vegetables (Fish /chicken /egg yolk)
3. Milk and milk products
4. All the above

13. Food items during 11-12months ☐

1. Idly with chutney/ dal
2. Pongal/kichidi with vegetables
3. Chapathi with kurmma
4. All the above

கருவி

பிரிவு –I

அடிப்படை விபரங்கள்

1. மாதிரி எண் ☐
2. வயது ☐
    1. ≤ 18 வயது
    2. 18-23 வயது
    3. 24-29 வயது
    4. 30-35 வயது
3. படிப்பு விவரம் ☐
    1. படிக்கவில்லை
    2. தொடக்கப்பள்ளி வரை
    3. மேல்நிலைப்பள்ளி வரை
    4. கல்லூரி படிப்பு வரை
4. குடும்ப மாத வருமானம் ☐
    1. ≤ ரூ.5,000/-
    2. ரூ.5,000-10,000/-
    3. ≥ ரூ.10,000/-
5. தொழில் ☐
    1. இல்லத்தரசி
    2. அரசு வேலை
    3. தனியார் வேலை
6. மதம் ☐
    1. இந்து
    2. முஸ்லீம்
    3. கிறிஸ்துவர்

7. பிரசவ கால விபரம்
    1. தாய்மை நிலை .....
    2. உயிரோடு இருக்கும் குழந்தைகள் .....
    3. குழந்தையின் பாலினம் .....
    4. கடைசி குழந்தையின் வயது .....
    5. குழந்தை பிறந்த முறை .....
        (அ) சுகபிரசவம் .....
        (ஆ) அறுவை சிகிச்சை முறை .....
    6. குறைமாத குழந்தை / நிறைமாத குழந்தை .....

பிரிவு

பகுதி –அ

I. குழந்தைக்கு பாலூட்டுதல் பற்றிய அறிவு ☐

1. குழந்தை பிறந்தவுடன் தரும் உணவு எது
   1. கொதிக்க வைத்து ஆறவைத்த நீர்
   2. தேன்
   3. தாய் பால்
   4. சர்க்கரை நீர்
2. குழந்தை பிறந்தவுடன் வரும் முதல் பால் எவ்வாறு இருக்கும் ☐
   1. மஞ்சள் நிற பால் எதிர்ப்பு சக்தியை கொண்டது
   2. தண்ணீர் நிற பால்
   3. வெள்ளை நிற பால்
   4. கெட்டி பால் (பிசு பிசுப்புத் தன்மையுடன் கூடியது)
3. பிரத்தியோக தாய்ப்பால் கொடுத்தல் என்றால் என்ன? ☐
   1. தாய்ப்பாலுடன் எப்பொழுதாவது தண்ணீர் கொடுத்தல்
   2. தாய்ப்பாலுடன் மற்ற வகை பால் கொடுத்தல்
   3. தாயப்பால் மற்றும் குளுக்கோஸ் நீர் கொடுத்தல்
   4. தாயப்பால் மட்டும் கொடுத்தல்
4. போதுமான அளவு தாய்ப்பால் கொடுப்பதின் அறிகுறிகள் ☐
   1. எப்பொழுதும் குழந்தை உறங்கி கொண்டே இருத்தல்
   2. ஒரு நாளைக்கு 8 முதல் 10 தடவை சிறுநீர் கழித்தல்
   3. பால் கொடுக்கும்போது தூங்குதல்
   4. குழந்தை அடிக்கடி அழாமல் இருத்தல்
5. பால் கொடுக்கும் முன் மார்பகத்தை எவ்வாறு சுத்தம் செய்ய வேண்டும் ☐
   1. சோப்பு மற்றும் தண்ணீர் கொண்டு சுத்தம் செய்தல்
   2. வெறும் கைகளால் துடைத்தல்
   3. ஈரத்துணியால் துடைத்தல்
   4. வெந்நீரால் துடைத்தல்
6. முதல் தாய்ப்பாலின் நற்குணம் என்ன ☐
   1. நோய் எதிர்ப்பு காரணிகள்

2. கொழுப்பு சத்து இருக்கும்
3. வைட்டமின்கள் இருக்கும்
4. மேல் கண்ட எல்லாம்

7. தாய்ப்பாலின் நன்மைகள் எவை ☐
   1. நோய் எதிர்ப்பு சக்தியை கொடுக்கிறது
   2. குழந்தையின் எடையை குறைக்கிறது
   3. குழந்தையின் எடையை தேவையைவிட அதிகரிப்பது
   4. மிக விரைவில் குழந்தைக்கு பல் முளைக்க செய்கிறது
8. குழந்தை தூங்க எந்த வகையான பால் அதிகம் ☐
   உபயோகமாகின்றது.
   1. புட்டி பால்
   2. தாய் பால்
   3. புட்டி பால் மற்றும் தாய் பால்
   4. வேறு உணவுகள்

II.இணை உணவு பற்றிய அறிவு

1. இணை உணவு என்றால் என்ன ☐
   1. தாய்ப்பால் மட்டும்
   2. தாய்ப்பாலில் இருந்து குடும்ப உணவுக்கு மாற்றுதல்
   3. குடும்ப பழக்க உணவு
   4. எதுவும் இல்லை
2. குழந்தைக்கு இணையுணவு ஆரம்பிக்க சரியான நேரம் ☐
   1. 4 மாதத்திற்கு பிறகு
   2. 6 மாதத்திற்கு பிறகு
   3. 1 வருடத்திற்கு பிறகு
   4. பிறந்த பிறகு எப்பொழுது வேண்டுமானாலும்
3. 6 மாதங்களில் குழந்தைக்கு எந்த வகையான இணையுணவு ☐
   கொடுக்கலாம்?
   1. லேசான கூழ்போன்ற உணவு மற்றும் தாய்ப்பால்
   2. பால் பவுடர் கொடுத்தல்
   3. பசுவின் பால் மற்றும் பிஸ்கட்
   4. தாய்ப்பால் மட்டும்

4. எந்த வகையான இணையுணவு குழந்தைக்கு 7 முதல் 9 மாதங்களில் கொடுக்கலாம் ☐

1.வீட்டில் தயாரிக்கும் உணவு அனைத்தும்

2.தாய்ப்பால் மட்டும்

3.பசும்பால் மற்றும் பிஸ்கட்டு

4.பருப்பு மற்றும் காய்கறிகள் மசித்தது

5. 10 முதல் 12 மாதங்களில் குழந்தைக்கு கொடுக்கக்கூடிய இணை உணவுகள் ☐

1. தாய்ப்பால் மட்டும்

2. கூழ் போன்ற உணவு

3. வீட்டில் தயாரிக்கும் உணவு அனைத்தும்

4. தண்ணீர் ஆகாரம்

6. தாமதமாக ஆரம்பிக்கும் இணை உணவுகளால் குழந்தைக்கு வரும் பிரச்சனைகள் ☐

1.ஊட்டச்சத்து குறைபாடு

2.தேவையில்லா எடை அதிகரித்தல்

3.பசியின்மை

4.அடிக்கடி காய்ச்சல்

7. குழந்தைக்கு இணை உணவு சரியான நேரத்தில் ஆரம்பிப்பதை குடும்பத்தினர் ☐

தவிர்ப்பதற்கான காரணங்கள்

1. குழந்தை மற்றும் தாயின் உடல்நிலை சரியில்லாமல் இருக்கும்போது
2. குடும்ப விழாக்களின் போது
3. தேவையான அளவு தாய்ப்பால் சுரக்கும்போது
4. குடும்பத்தாரின் அறி

PART -B

I. பிறந்த குழந்தைக்கு தாய்ப்பால் கொடுப்பதை பற்றிய பழக்கமுறைகள் ☐

1. குழந்தைக்கு தாய்ப்பால் கொடுப்பதற்கு ஏற்ற நேரம்
    1. பிறந்த அரைமணி நேரத்திற்கு பிறகு
    2. பிறந்து ஒரு மணி நேரத்திற்கு பிறகு
    3. பிறந்து இரண்டு மணி நேரத்தில்
    4. பிறந்த உடன்

2. தாய்ப்பால் கொடுக்கும்போது குழந்தையின் வாயில் இருக்க வேண்டிய பகுதி ☐
    1. மார்பக காம்பு மட்டும்
    2. காம்பு மற்றும் மார்பக எல்லா பகுதிகளும்
    3. காம்பு மற்றும் முலைக்காம்பு
    4. முழு மார்பகம்

3. குழந்தை முழுமையாக பால் குடிப்பதை அறிந்து கொள்ள உதவுவது ☐
    1. நன்றாக வாயை திறக்குதல்
    2. குழந்தையின் தாடை மார்பகத்தை தொட்டு கொண்டு பால் குடித்தல்
    3. குழந்தையின் கண்ணம் உப்பியிரத்தல்
    4. மேல் கண்ட எல்லாம்

4. குழந்தைக்கு பால் குடித்தபின் எதிர்களிப்பை எவ்வாறு தவிர்ப்பது ☐
    1. முதுகைத்தட்டி ஏப்பம் வரவைத்தல்
    2. தாயின் மடியில் வைப்பது
    3. வயிற்று பகுதியில் படுக்க வைத்தல்
    4. குழந்தையை நேராக படுக்க வைத்தல்

5.பால் கொடுக்கும்போது குழந்தை இருக்க வேண்டிய நிலை ☐
    1. குழந்தையின் தலை தாயின் உள்ளங்கையில் இருக்க வேண்டும்
    2. குழந்தையின் தலை மார்பகத்தின் பக்கம் திரும்பியிருக்க வேண்டும்
    3. குழந்தையின் தலை மற்றும் உடல் மேல்நோக்கி இருக்க வேண்டும்
    4. குழந்தையின் தலை மற்றும் உடல் மார்பகத்தை நோக்கி திரும்பியிருக்க வேண்டும்

6. பிரத்தியோக தாய்ப்பால் எத்தனை மாதம் வரை குழந்தைக்கு தரவேண்டும் ☐
    1. 6 மாதம் வரை
    2. 1 வயது வரை

3. 2 வயது வரை

4. 2 ½ வயது வரை

II. **இணை உணவு பற்றிய பழக்க முறைகள்**

1. இணை உணவு ஆரம்பிக்கும்போது புதிய உணவைத் தேர்ந்தெடுக்க வேண்டிய முறை ☐
   1. ஒரு தரம் கொடுக்கும்போது நிறைய அளவு கொடுத்தல்
   2. வாரத்திற்கு ஒரு முறை ஒரு வகை உணவு
   3. விதவிதமான திரவ உணவு மட்டும் கொடுக்க வேண்டும்
   4. ஒவ்வொரு முறையும் வெவ்வேறான உணவு பொருட்கள்
2. முதன்முதலில் புதிய உணவு கொடுக்கும் போது தாய் கவனிக்க வேண்டியது ☐
   1. உடம்பில் அரிப்பு ஏற்படும்
   2. வயிற்று போக்கு
   3. மலச்சிக்கல்
   4. மேற்கண்ட எல்லாம்
3. இணை உணவு ஆரம்பித்த பின் குழந்தை தாய்ப்பாலை தவிர்த்தால் தாய் என்ன செய்ய வேண்டும் ☐
   1. தாய்ப்பாலை நிறுத்த வேண்டும்
   2. இணை உணவை நிறுத்த வேண்டும்
   3. தாய்ப்பால் கொடுத்துவிட்டு சிறிது நேரத்திற்கு பின்னர் இணை உணவு ஆரம்பித்தல்
   4. என்ன செய்வது என்று தெரியவில்லை
4. இணை உணவு கொடுக்கும் முன் தாய் செய்ய வேண்டியது ☐
   1. உணவு கொடுப்பதற்குமுன் மட்டும் கைகளை கழுவுதல்
   2. உணவு கொடுப்பதற்கு பின் மட்டும் கைகளை கழுவுதல்
   3. உணவு கொடுப்பதற்கு முன்னும் பின்னும் கைகளை கழுவுதல்
   4. கைகளை கழுவ வேண்டியதே இல்லை
5. உணவு கொடுப்பதற்கு உரிய பாத்திரங்களை கழுவ வேண்டிய முறை ☐
   1. சோப்பு போட்டு கழுவுதல்
   2. குழாய் நீரில் கழுவுதல்
   3. கொதித்த நீரில் (சுடு நீர்) கழுவுதல்
   4. பாத்திரங்களை கழுவி கொதிக்க வைத்தல்

6. இணை உணவு கொடுத்து முடித்தபின் குழந்தைக்கு கொடுக்க வேண்டியது ☐
   1. ஆற வைத்த குடிநீர்
   2. டீ மற்றும் காபி
   3. குளிர் பானங்கள்
   4. மேற்கண்டவை எவையும் இல்லை
7. இணை உணவின் தரம் எப்படி இருக்க வேண்டும் ☐
   1. அதிகமாக வேக வைத்த உணவு
   2. சமைக்காத உணவு வகை(பச்சையாக)
   3. பாதியாக சமைத்த உணவு (பாதி வேக வைத்த உணவு)
   4. நன்றாக சமைத்த உணவு (நன்றாக வேக வைத்த உணவு)
8. எந்த வயதுக்கு முன் இணை உணவை கொடுத்து முடித்து விட வேண்டும் ☐
   1. குழந்தைக்கு 4 வயது முடிந்த பின்
   2. குழந்தைக்கு 3 வயது முடிந்த பின்
   3. குழந்தைக்கு 2 வயது முடிந்த பின்
   4. குழந்தைக்கு 1 வயது முடிந்த பின்
9. 6 மாதத்தில் கொடுக்க வேண்டிய உணவுகள் ☐
   1. வேகவைத்து, மசிதத்த உருளை கிழங்கு மற்றும் கேரட்
   2. பழச்சாறு
   3. கேழ்வரகு கூழ்
   4. மேற்கூரியவை அனைத்தும் ☐
10. 6 மாதத்தில் உணவு ஆரம்பிக்கும் போது தாய் நினைவில் கொள்ள வேண்டியது
   1. சிறிய அளவு உணவு கொடுக்க வேண்டும் (தேக்கரண்டி அளவு)
   2. உப்போ (அ) சர்க்கரையோ சேர்க்க வேண்டிய அவசியமில்லை
   3. விருப்பமின்றி உணவினை திணிக்கக்கூடாது
   4. மேற்கண்ட அனைத்தும ☐
11. 7-8 மாதத்தில் கொடுக்க வேண்டிய உணவுகள்
   1. கேழ்வரகு(அ) கோதுமை கஞ்சி
   2. காய்கறி சாறு மற்றும் பழச்சாறு
   3. தாய்ப்பால் மற்றும் மேற்கூறிய இரண்டும்
   4. தாய்ப்பால் மட்டும்

12. 9-10 மாதத்தில் கொடுக்க வேண்டிய உணவுகள்

1. வேக வைத்த சாதம்
2. இறைச்சி வகைகள்(மீன்,கோழி இறைச்சி, முட்டை மஞ்சள் கரு மட்டும்)
3. பால் தயிர் மற்றும் வெண்ணெய் போன்றவை
4. மேற்கூறிய அனைத்தும்

13. 11-12 மாதத்தில் கொடுக்க வேண்டிய உணவு

1. இட்லி உடன் பருப்பு அல்லது சட்னி
2. பொங்கல் (அ) காய்கறி கிச்சடி 1 சிறிய கப்
3. சப்பாத்தி உடன் குருமா சேர்த்து
4. மேற்கூறியவை அனைத்தும்

APPENDIX-7

CERTIFICATE FOR ENGLISH EDITING

From

Mrs. T.Vajramala

II MSC (N)

R.V.S college of Nursing

Sulur, Coimbatore

To

Dear Sir/ Madam

I **Mrs.T.Vajramala, II M.S.c (N)** student wish to get the English editing for my research tool. I kindly request you to do the needful.

Thanking you

Yours sincerely

APPENDIX - 8

'REPORT OF SELF ANALYSIS DONE TO RULE OUT PLAGIARISM USING THE SOFTWARE PLAGIARISM DETECTOR'

Filename: Comparative study to assess the level of knowledge and practice on infant feeding among working and non-working mothers in selected community areas at Coimbatore

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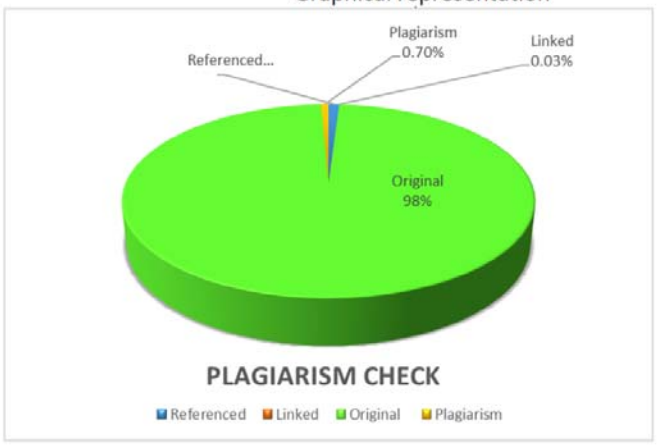

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